MARYLAND VEHICLE EMISSIONS INSPECTION PROGRAM

REPORT TO THE U.S. ENVIRONMENTAL PROTECTION AGENCY

CALENDAR YEAR 2014

Maryland Department of the Environment

Maryland Department of Transportation
Motor Vehicle Administration

July 2015

MARYLAND VEHICLE EMISSIONS INSPECTION PROGRAM
REPORT TO THE U.S. ENVIRONMENTAL PROTECTION AGENCY
January 1, 2014 Through December 31, 2014

This report covers the Maryland Vehicle Emissions Inspection Program (VEIP) for the time period January 1, 2014 through December 31, 2014. The information is provided in accordance with 40 CFR PART 51, Subpart S - Inspection/Maintenance Program Requirements, §51.366.

VEHICLE EMISSIONS INSPECTION PROGRAM BACKGROUND

In July 2002 Maryland initiated mandatory pass/fail OBD testing for model year 1996 and newer light duty vehicles and light duty trucks, up to 8,500 pounds GVWR.

In July 2005, Maryland changed the official test for model year 1984 and newer vehicles with a GVWR between 8,501 and 10,000 pounds to the idle test.

In August 2009, the test procedure for all non-OBD tested vehicles became an idle test with mandatory pass/fail gas cap pressure test and catalytic converter check. Idle test cutpoints were tightened for model year 1991 and newer vehicles up to 10,000 lb, and model year 1993 and newer vehicles between 10,001 and 26,000 lb.

In August 2009, Maryland began OBD testing model year 2008 vehicles weighing between 8,501 and 14,000 lb. In order to accommodate this change, the HDGT2 weight class was broken into 2 classes. HDGT2 is now 10,001 – 14,000, and HDGT3 is 14,001 – 26,000 lb.

In August 2009, Maryland closed inspection station 10, in accordance with a request from the FAA.

On November 30, 2009, refurbishment of the stations was complete, and inspections began using the new test equipment. Self-contained testing units allowed the installation of 2 testing units in some test lanes.

During 2011, fleets that had been self-testing were converted to equipment that is essentially identical to that used in the state's stations, and their testing activity was included in data that Maryland receives from it's contractor. These fleets consist of local government, utilities, and the State University.

CURRENT PROGRAM DESCRIPTION

Program Design:	Centralized with additional self-testing fleets 18 Centralized Inspection Stations 106 Centralized Inspection Units 11 Self-testing Fleets with 37 Inspection Units
Test Frequency:	Biennial
Test Area:	13 Maryland Counties and Baltimore City
Subject Vehicles:	1977 and newer Two newest model years are exempt
Test Type:	OBD test for 1996 and newer model years up to 8,500 pounds GVWR and for model year 2008 and newer vehicles with a GVWR of 8,501 through 14,000 pounds. Idle emissions with tampering check (catalytic converter) and gas cap test for 1977 through 1995 model years, for vehicles with a GVWR of 8,501 through 14,000 pounds up to model year 2007, and for vehicles with a GVWR of 14,001 through 26,000 pounds
Operating Agencies:	Maryland Department of the Environment (MDE) Maryland Department of Transportation Motor Vehicle Administration (MVA) Envirotest (Operations Contractor)

(a) **TEST DATA REPORT**

(1) The number of vehicles tested by model year and vehicle type:

	OBD					Idle						
Model Year	HDGT 1	HDGT 2	LDGT 1	LDGT 2	LDGV	HDGT 1	HDGT 2	HDGT 3	LDGT 1	LDGT 2	LDGV	Total
1977						8	1	0	8	11	20	48
1978						9	1	0	7	21	41	79
1979						10	0	0	9	23	49	91
1980						8	2	0	8	10	31	59
1981						8	0	0	14	7	40	69
1982						9	1	0	20	10	50	90
1983						8	0	0	32	19	82	141
1984						20	3	0	77	25	146	271
1985						39	1	0	96	34	257	427
1986						42	1	0	214	69	401	727
1987						55	9	0	358	97	581	1,100
1988						101	35	2	458	233	756	1,585
1989						153	19	1	585	342	1,109	2,209
1990						130	21	2	628	331	1,618	2,730
1991						98	11	4	903	367	2,434	3,817
1992						114	26	0	864	755	3,105	4,864
1993						174	45	0	1,685	1,234	4,886	8,024
1994						310	80	6	2,807	2,091	6,810	12,104
1995						774	104	3	4,724	3,244	11,999	20,848
1996			5,524	2,658	12,359	637	56	1				21,235
1997			9,398	3,572	17,766	1,338	110	38				32,222
1998			11,139	4,297	22,306	827	121	1				38,691
1999			13,135	8,302	28,329	1,654	128	19				51,567
2000			18,538	8,598	37,449	2,515	125	20				67,245
2001			20,253	10,276	37,859	2,898	240	21				71,547
2002			28,346	12,501	46,790	3,004	173	25				90,839
2003			30,461	16,455	49,284	3,989	191	52				100,432
2004			38,263	17,993	52,740	3,801	227	23				113,047
2005			39,578	15,938	53,034	3,358	273	49				112,230
2006			39,064	15,241	63,962	4,248	329	35				122,879
2007			34,416	15,442	61,311	2,622	134	102				114,027
2008	3,114	322	34,000	20,110	71,493			91				125,694
2009	1,516	165	19,556	9,610	47,081			80				76,327
2010	1771	186	33,153	16,674	69,114			60				119,001
2011	3,032	259	28,435	17,123	47,317			224				93,099
2012	2,859	1661	32,428	18,987	81,849			140				133,404
Total	12292	2593	435,687	213,777	800,043	32,961	2,467	999	13,497	8,923	34,415	1,557,654

Table (a) (1) (b) OBD Tests

Model Year	HDGT 1	HDGT 2	LDGT 1	LDGT 2	LDGV	Total
1996			5,524	2,658	12,359	20,541
1997			9,398	3,572	17,766	30,736
1998			11,139	4,297	22,306	37,742
1999			13,135	8,302	28,329	49,766
2000			18,538	8,598	37,449	64,585
2001			20,253	10,276	37,859	68,388
2002			28,346	12,501	46,790	87,637
2003			30,461	16,455	49,284	96,200
2004			38,263	17,993	52,740	108,996
2005			39,578	15,938	53,034	108,550
2006			39,064	15,241	63,962	118,267
2007			34,416	15,442	61,311	111,169
2008	3,114	322	34,000	20,110	71,493	129,039
2009	1,516	165	19,556	9,610	47,081	77,928
2010	1,771	186	33,153	16,674	69,114	120,898
2011	3,032	259	28,435	17,123	47,317	96,166
2012	2,859	1,661	32,428	18,987	81,849	137,784
Total:	12,292	2,593	435,687	213,777	800,043	1,464,392

Table (a) (1) (c) Idle Tests

Model Year	HDGT 1	HDGT 2	HDGT 3	LDGT 1	LDGT 2	LDGV	Total
1977	8	1	0	8	11	20	48
1978	9	1	0	7	21	41	79
1979	10	0	0	9	23	49	91
1980	8	2	0	8	10	31	59
1981	8	0	0	14	7	40	69
1982	9	1	0	20	10	50	90
1983	8	0	0	32	19	82	141
1984	20	3	0	77	25	146	271
1985	39	1	0	96	34	257	427
1986	42	1	0	214	69	401	727
1987	55	9	0	358	97	581	1,100
1988	101	35	2	458	233	756	1,585
1989	153	19	1	585	342	1,109	2,209
1990	130	21	2	628	331	1,618	2,730
1991	98	11	4	903	367	2,434	3,817
1992	114	26	0	864	755	3,105	4,864
1993	174	45	0	1,685	1,234	4,886	8,024
1994	310	80	6	2,807	2,091	6,810	12,104
1995	774	104	3	4,724	3,244	11,999	20,848
1996	637	56	1				694
1997	1,338	110	38				1,486
1998	827	121	1				949
1999	1,654	128	19				1,801
2000	2,515	125	20				2,660
2001	2,898	240	21				3,159
2002	3,004	173	25				3,202
2003	3,989	191	52				4,232
2004	3,801	227	23				4,051
2005	3,358	273	49				3,680
2006	4,248	329	35				4,612
2007	2,622	134	102				2,858
2008			91				91
2009			80				80
2010			60				60
2011			224				224
2012			140				140
Total:	32,961	2,467	999	13,497	8,923	34,415	93,262

Light Duty Gasoline Vehicle (LDGV): No Weight Limit

Light Duty Gasoline Truck 1 (LDGT1): Up to 6,000 pounds GVWR

Light Duty Gasoline Truck 2 (LDGT2): 6,001 to 8,500 pounds GVWR

Heavy Duty Gasoline Truck 1 (HDGT1): 8,501 to 10,000 pounds GVWR

Heavy Duty Gasoline Truck 2 (HDGT2): 10,001 to 14,000 pounds GVWR

Heavy Duty Gasoline Truck 3 (HDGT3): 14,001 to 26,000 pounds GVWR

(2) By model year and vehicle type, the number and percentage of vehicles:

(i) Failing initially, per test type:

Table (a) (2) (i) (a) OBD

Model	Number of Vehicles						% of Vehicles Tested						
Year	HDGT 1	HDGT 2	LDGT 1	LDGT 2	LDGV	Total	HDGT 1	HDGT 2	LDGT 1	LDGT 2	LDGV	LDGV	Total
1996			1,246	631	2,701	4,578		-	-	22.6%	23.7%	21.9%	22.3%
1997			2,013	891	3,717	6,621		-	-	21.4%	24.9%	20.9%	21.5%
1998			2,098	906	4,711	7,715		-	-	18.8%	21.1%	21.1%	20.4%
1999			2,343	1,715	5,742	9,800		-	-	17.8%	20.7%	20.3%	19.7%
2000			3,193	1,508	7,561	12,262		-	-	17.2%	17.5%	20.2%	19.0%
2001			4,070	1,793	7,257	13,120		-	-	20.1%	17.4%	19.2%	19.2%
2002			4,228	1,545	7,021	12,794		-	-	14.9%	12.4%	15.0%	14.6%
2003			3,828	2,183	6,146	12,157		-	-	12.6%	13.3%	12.5%	12.6%
2004			3,474	1,818	4,771	10,063		-	-	9.1%	10.1%	9.0%	9.2%
2005			3,347	1,448	4,598	9,393		-	-	8.5%	9.1%	8.7%	8.7%
2006			2,314	1,194	3,985	7,493		-	-	5.9%	7.8%	6.2%	6.3%
2007			1,431	1,044	2,735	5,210		-	-	4.2%	6.8%	4.5%	4.7%
2008	195	23	773	750	1,916	3,657		6.3%	7.1%	2.3%	3.7%	2.7%	2.8%
2009	87	18	382	285	939	1,711		5.7%	10.9%	2.0%	3.0%	2.0%	2.2%
2010	66	7	276	272	857	1,478		3.7%	3.8%	0.8%	1.6%	1.2%	1.2%
2011	73	8	148	124	439	792		2.4%	3.1%	0.5%	0.7%	0.9%	0.8%
2012	40	12	105	103	457	717		1.4%	0.7%	0.3%	0.5%	0.6%	0.5%
Total:	461	68	35,269	18,210	65,553	119,561		3.8%	2.6%	8.1%	8.5%	8.2%	8.2%

Table (a) (2) (i) (b) Idle

	Number of Vehicles							% of Vehicles Tested						
Model Year	HDGT 1	HDGT 2	HDGT 3	LDGT 1	LDGT 2	LDGV	Total	HDGT 1	HDGT 2	HDGT 3	LDGT 1	LDGT 2	LDGV	Total
1977	4	0	0	0	2	2	8	50.0%	0.0%	-	0.0%	18.2%	10.0%	16.7%
1978	0	1	0	2	8	9	20	0.0%	100.0%	-	28.6%	38.1%	22.0%	25.3%
1979	4	0	0	2	6	13	25	40.0%	-	-	22.2%	26.1%	26.5%	27.5%
1980	0	1	0	2	3	5	11	0.0%	50.0%	-	25.0%	30.0%	16.1%	18.6%
1981	2	0	0	7	3	10	22	25.0%	-	-	50.0%	42.9%	25.0%	31.9%
1982	3	1	0	5	5	6	20	33.3%	100.0%	-	25.0%	50.0%	12.0%	22.2%
1983	6	0	0	14	7	20	47	75.0%	-	-	43.8%	36.8%	24.4%	33.3%
1984	8	2	0	35	10	39	94	40.0%	66.7%	-	45.5%	40.0%	26.7%	34.7%
1985	17	0	0	31	17	49	114	43.6%	0.0%	-	32.3%	50.0%	19.1%	26.7%
1986	21	0	0	57	28	72	178	50.0%	0.0%	-	26.6%	40.6%	18.0%	24.5%
1987	17	4	0	75	26	73	195	30.9%	44.4%	-	20.9%	26.8%	12.6%	17.7%
1988	26	13	2	75	28	93	237	25.7%	37.1%	100.0%	16.4%	12.0%	12.3%	15.0%
1989	35	2	0	105	67	132	341	22.9%	10.5%	0.0%	17.9%	19.6%	11.9%	15.4%
1990	32	3	1	140	55	217	448	24.6%	14.3%	50.0%	22.3%	16.6%	13.4%	16.4%
1991	25	4	2	170	60	327	588	25.5%	36.4%	50.0%	18.8%	16.3%	13.4%	15.4%
1992	24	1	0	152	149	440	766	21.1%	3.8%	-	17.6%	19.7%	14.2%	15.7%
1993	38	5	0	236	261	727	1,267	21.8%	11.1%	-	14.0%	21.2%	14.9%	15.8%
1994	74	26	1	407	417	884	1,809	23.9%	32.5%	16.7%	14.5%	19.9%	13.0%	14.9%
1995	149	23	0	559	557	1,444	2,732	19.3%	22.1%	0.0%	11.8%	17.2%	12.0%	13.1%
1996	146	16	0				162	22.9%	28.6%	0.0%				23.3%
1997	219	26	7				252	16.4%	23.6%	18.4%				17.0%
1998	156	21	0				177	18.9%	17.4%	0.0%				18.7%
1999	237	24	4				265	14.3%	18.8%	21.1%				14.7%
2000	360	28	7				395	14.3%	22.4%	35.0%				14.8%
2001	319	40	7				366	11.0%	16.7%	33.3%				11.6%
2002	307	33	5				345	10.2%	19.1%	20.0%				10.8%
2003	345	36	6				387	8.6%	18.8%	11.5%				9.1%
2004	257	25	3				285	6.8%	11.0%	13.0%				7.0%
2005	174	32	4				210	5.2%	11.7%	8.2%				5.7%
2006	125	25	8				158	2.9%	7.6%	22.9%				3.4%
2007	54	11	12				77	2.1%	8.2%	11.8%				2.7%
2008			6				6	-	-	6.6%				6.6%
2009			2				2	-	-	2.5%				2.5%
2010			1				1	-	-	1.7%				1.7%
2011			9				9	-	-	4.0%				4.0%
2012			0				0	-	-	0.0%				0.0%
Total:	3,184	403	87	2,074	1,709	4,562	12,019	9.7%	16.3%	8.7%	15.4%	19.2%	13.3%	12.9%

(ii) Failing the first retest, per test type:

Table (a) (2) (ii) (a) OBD

Model	Number of Vehicles						% of First Retests					
Year	HDGT1	HDGT2	LDGT1	LDGT2	LDGV	Total	HDGT1	HDGT2	LDGT1	LDGT2	LDGV	Total
1996			204	123	382	709			37.3%	45.1%	37.0%	38.3%
1997			368	160	586	1,114			41.4%	41.8%	40.0%	40.7%
1998			356	144	749	1,249			37.6%	38.5%	39.3%	38.7%
1999			421	311	941	1,673			39.1%	39.9%	40.0%	39.7%
2000			518	264	1,244	2,026			34.4%	37.9%	39.1%	37.6%
2001			735	340	1,241	2,316			37.4%	37.6%	39.3%	38.4%
2002			768	267	1,105	2,140			34.9%	33.0%	34.8%	34.6%
2003			645	356	929	1,930			31.8%	30.3%	32.1%	31.7%
2004			566	288	615	1,469			29.9%	28.9%	27.0%	28.4%
2005			522	206	657	1,385			28.2%	24.9%	26.8%	27.0%
2006			347	181	480	1,008			27.5%	25.8%	22.2%	24.5%
2007			190	158	326	674			21.9%	25.6%	21.6%	22.5%
2008	25	2	87	76	207	397	22.3%	16.7%	19.3%	16.5%	18.9%	18.6%
2009	15	2	36	26	95	174	24.2%	12.5%	14.5%	13.5%	18.3%	16.7%
2010	11	0	22	21	78	132	24.4%	0.0%	12.2%	11.4%	14.7%	14.0%
2011	8	2	12	10	26	58	19.0%	33.3%	7.0%	5.8%	5.4%	6.7%
2012	6	1	10	2	24	43	19.4%	11.1%	13.9%	3.2%	8.4%	9.3%
Total:	65	7	5,807	2,933	9,685	18,497	21.6%	14.6%	32.1%	30.8%	32.0%	31.8%

Table (a) (2) (ii) (b) Idle

Model Year	Number of Vehicles							% of First Retests						
	HDGT1	HDGT2	HDGT3	LDGT1	LDGT2	LDGV	Total	HDGT1	HDGT2	HDGT3	LDGT1	LDGT2	LDGV	Total
1977	0	0	0	0	0	0	0	0.0%	-	-	-	0.0%	0.0%	0.0%
1978	0	0	0	0	1	0	1	-	-	-	0.0%	16.7%	0.0%	11.1%
1979	0	0	0	0	1	0	1	0.0%	-	-	0.0%	33.3%	0.0%	9.1%
1980	0	0	0	0	1	2	3	-	-	-	0.0%	33.3%	66.7%	42.9%
1981	0	0	0	0	1	2	3	0.0%	-	-	0.0%	33.3%	100.0%	30.0%
1982	1	0	0	1	1	0	3	100.0%	0.0%	-	33.3%	50.0%	0.0%	30.0%
1983	2	0	0	3	1	3	9	66.7%	-	-	27.3%	50.0%	23.1%	31.0%
1984	3	1	0	2	3	5	14	50.0%	100.0%	-	14.3%	60.0%	27.8%	31.8%
1985	3	0	0	3	2	6	14	60.0%	-	-	17.6%	20.0%	25.0%	25.0%
1986	4	0	0	10	2	9	25	33.3%	-	-	28.6%	16.7%	22.5%	25.3%
1987	1	0	0	16	2	9	28	11.1%	0.0%	-	34.0%	13.3%	22.0%	24.3%
1988	5	0	2	14	7	11	39	33.3%	0.0%	100.0%	28.0%	50.0%	21.2%	27.9%
1989	5	1	0	13	9	16	44	27.8%	50.0%	-	21.0%	20.9%	24.6%	23.2%
1990	5	0	0	23	7	28	63	29.4%	0.0%	0.0%	28.0%	20.6%	26.7%	26.1%
1991	2	0	1	28	5	49	85	15.4%	0.0%	100.0%	26.9%	14.3%	28.0%	25.7%
1992	2	0	0	16	21	60	99	14.3%	0.0%	-	17.8%	22.8%	24.8%	22.6%
1993	7	0	0	20	40	114	181	29.2%	0.0%	-	14.7%	29.0%	29.3%	26.3%
1994	15	6	0	56	65	137	279	34.1%	42.9%	0.0%	23.1%	27.1%	29.1%	27.6%
1995	24	7	0	72	96	185	384	26.4%	36.8%	-	21.2%	31.2%	23.9%	25.1%
1996	29	1	0				30	35.8%	9.1%	-				32.6%
1997	38	6	0				44	28.8%	35.3%	0.0%				28.4%
1998	34	6	0				40	33.0%	37.5%	-				33.6%
1999	38	7	1				46	24.5%	36.8%	50.0%				26.1%
2000	54	6	0				60	22.3%	26.1%	0.0%				22.3%
2001	40	7	1				48	19.6%	25.9%	20.0%				20.3%
2002	57	2	1				60	26.0%	11.8%	25.0%				25.0%
2003	48	8	2				58	20.5%	33.3%	50.0%				22.1%
2004	38	3	1				42	19.4%	15.0%	33.3%				19.2%
2005	13	1	1				15	10.2%	5.9%	33.3%				10.2%
2006	14	2	1				17	15.6%	10.5%	14.3%				14.7%
2007	3	2	0				5	7.0%	22.2%	0.0%				8.6%
2008			2				2			33.3%				33.3%
2009			0				0			0.0%				0.0%
2010			0				0			0.0%				0.0%
2011			0				0			0.0%				0.0%
2012			0				0			-				-
Total:	485	66	13	277	265	636	1,742	23.1%	24.2%	20.6%	22.4%	27.4%	26.2%	24.7%

(iii) Passing the first retest per test type:

Table (a) (2) (iii) (a) OBD

Model	Number of Vehicles						% of First Retests					
Year	HDGT1	HDGT2	LDGT1	LDGT2	LDGV	Total	HDGT1	HDGT2	LDGT1	LDGT2	LDGV	Total
1996			343	150	650	1,143	-	-	62.7%	54.9%	63.0%	61.7%
1997			520	223	879	1,622	-	-	58.6%	58.2%	60.0%	59.3%
1998			590	230	1,156	1,976	-	-	62.4%	61.5%	60.7%	61.3%
1999			657	469	1,411	2,537	-	-	60.9%	60.1%	60.0%	60.3%
2000			989	433	1,937	3,359	-	-	65.6%	62.1%	60.9%	62.4%
2001			1,231	565	1,916	3,712	-	-	62.6%	62.4%	60.7%	61.6%
2002			1,433	543	2,072	4,048	-	-	65.1%	67.0%	65.2%	65.4%
2003			1,384	819	1,963	4,166	-	-	68.2%	69.7%	67.9%	68.3%
2004			1,329	710	1,667	3,706	-	-	70.1%	71.1%	73.0%	71.6%
2005			1,328	620	1,793	3,741	-	-	71.8%	75.1%	73.2%	73.0%
2006			915	520	1,679	3,114	-	-	72.5%	74.2%	77.8%	75.5%
2007			679	459	1,184	2,322	-	-	78.1%	74.4%	78.4%	77.5%
2008	87	10	364	386	888	1,735	77.7%	83.3%	80.7%	83.5%	81.1%	81.4%
2009	47	14	213	167	424	865	75.8%	87.5%	85.5%	86.5%	81.7%	83.3%
2010	34	4	159	163	453	813	75.6%	100.0%	87.8%	88.6%	85.3%	86.0%
2011	43	5	83	81	265	477	84.3%	71.4%	87.4%	89.0%	91.1%	89.2%
2012	25	8	62	61	263	419	80.6%	88.9%	86.1%	96.8%	91.6%	90.7%
Total:	236	41	12,279	6,599	20,600	39,755	78.4%	85.4%	67.9%	69.2%	68.0%	68.2%

Table (a) (2) (iii) (b) Idle

Model	Number of Vehicles							% of First Retests						
Year	HDGT1	HDGT2	HDGT3	LDGT1	LDGT2	LDGV	Total	HDGT1	HDGT2	HDGT3	LDGT1	LDGT2	LDGV	Total
1977	1	0	0	0	1	1	3	100.0%	-	-	-	100.0%	100.0%	100.0%
1978	0	0	0	1	5	2	8	-	-	-	100.0%	83.3%	100.0%	88.9%
1979	1	0	0	1	2	6	10	100.0%	-	-	100.0%	66.7%	100.0%	90.9%
1980	0	0	0	1	2	1	4	-	-	-	100.0%	66.7%	33.3%	57.1%
1981	2	0	0	3	2	0	7	100.0%	-	-	100.0%	66.7%	0.0%	70.0%
1982	0	1	0	2	1	3	7	0.0%	100.0%	-	66.7%	50.0%	100.0%	70.0%
1983	1	0	0	8	1	10	20	33.3%	-	-	72.7%	50.0%	76.9%	69.0%
1984	3	0	0	12	2	13	30	50.0%	0.0%	-	85.7%	40.0%	72.2%	68.2%
1985	2	0	0	14	8	18	42	40.0%	-	-	82.4%	80.0%	75.0%	75.0%
1986	8	0	0	25	10	31	74	66.7%	-	-	71.4%	83.3%	77.5%	74.7%
1987	8	3	0	31	13	32	87	88.9%	100.0%	-	66.0%	86.7%	78.0%	75.7%
1988	10	7	0	36	7	41	101	66.7%	100.0%	0.0%	72.0%	50.0%	78.8%	72.1%
1989	13	1	0	49	34	49	146	72.2%	50.0%	-	79.0%	79.1%	75.4%	76.8%
1990	12	2	1	59	27	77	178	70.6%	100.0%	100.0%	72.0%	79.4%	73.3%	73.9%
1991	11	3	0	76	30	126	246	84.6%	100.0%	0.0%	73.1%	85.7%	72.0%	74.3%
1992	12	1	0	74	71	182	340	85.7%	100.0%	-	82.2%	77.2%	75.2%	77.4%
1993	17	1	0	116	98	275	507	70.8%	100.0%	-	85.3%	71.0%	70.7%	73.7%
1994	29	8	1	186	175	333	732	65.9%	57.1%	100.0%	76.9%	72.9%	70.9%	72.4%
1995	67	12	0	267	212	588	1,146	73.6%	63.2%	-	78.8%	68.8%	76.1%	74.9%
1996	52	10	0				62	64.2%	90.9%	-				67.4%
1997	94	11	6				111	71.2%	64.7%	100.0%				71.6%
1998	69	10	0				79	67.0%	62.5%	-				66.4%
1999	117	12	1				130	75.5%	63.2%	50.0%				73.9%
2000	188	17	4				209	77.7%	73.9%	100.0%				77.7%
2001	164	20	4				188	80.4%	74.1%	80.0%				79.7%
2002	162	15	3				180	74.0%	88.2%	75.0%				75.0%
2003	186	16	2				204	79.5%	66.7%	50.0%				77.9%
2004	158	17	2				177	80.6%	85.0%	66.7%				80.8%
2005	114	16	2				132	89.8%	94.1%	66.7%				89.8%
2006	76	17	6				99	84.4%	89.5%	85.7%				85.3%
2007	40	7	6				53	93.0%	77.8%	100.0%				91.4%
2008			4				4			66.7%				66.7%
2009			2				2			100.0%				100.0%
2010			1				1			100.0%				100.0%
2011			5				5			100.0%				100.0%
2012			0				0			-				-
Total:	1,617	207	50	961	701	1,788	5,324	76.9%	75.8%	79.4%	77.6%	72.6%	73.8%	75.3%

(iv) Initially failed vehicles passing the second or subsequent retest per test type:

Table (a) (2) (iv) (a) OBD

Model	Number of Vehicles						% of 2nd or Subsequent Retests					
Year	HDGT1	HDGT2	LDGT1	LDGT2	LDGV	Total	HDGT1	HDGT2	LDGT1	LDGT2	LDGV	Total
1996			179	80	300	559	-	-	65.8%	59.7%	59.8%	61.6%
1997			260	136	439	835	-	-	60.6%	66.7%	57.7%	59.9%
1998			321	119	583	1,023	-	-	68.4%	64.3%	58.4%	61.9%
1999			361	261	715	1,337	-	-	66.9%	66.2%	57.1%	61.2%
2000			438	242	942	1,622	-	-	63.0%	67.2%	58.9%	61.1%
2001			547	269	887	1,703	-	-	58.3%	63.4%	58.2%	59.0%
2002			620	231	906	1,757	-	-	67.4%	66.8%	64.6%	65.9%
2003			599	335	819	1,753	-	-	66.4%	65.6%	62.8%	64.5%
2004			517	299	658	1,474	-	-	70.3%	68.1%	68.5%	69.0%
2005			474	230	687	1,391	-	-	64.2%	71.7%	70.4%	68.4%
2006			326	189	575	1,090	-	-	67.6%	70.0%	76.4%	72.4%
2007			212	173	392	777	-	-	71.6%	77.9%	75.0%	74.6%
2008	37	3	114	106	290	550	0.0%	0.0%	71.7%	79.7%	80.3%	84.2%
2009	18	3	56	50	182	309	81.8%	100.0%	83.6%	86.2%	86.7%	92.2%
2010	14	1	33	36	127	211	87.5%	100.0%	82.5%	87.8%	84.1%	90.9%
2011	12	2	24	21	67	126	85.7%	100.0%	92.3%	80.8%	90.5%	100.0%
2012	5	0	21	17	78	121	83.3%	0.0%	100.0%	94.4%	96.3%	100.8%
Total:	86	9	5,102	2,794	8,647	16,638	81.9%	81.8%	66.0%	68.4%	64.4%	65.9%

Table (a) (2) (iv) (b) Idle

Model	Number of Vehicles							% of 2nd or Subsequent Retests						
Year	HDGT1	HDGT2	HDGT3	LDGT1	LDGT2	LDGV	Total	HDGT1	HDGT2	HDGT3	LDGT1	LDGT2	LDGV	Total
1977	2	0	0	0	0	0	2	100.0%	-	-	-	-	-	100.0%
1978	0	0	0	0	0	1	1	-	-	-	-	0.0%	100.0%	50.0%
1979	0	0	0	0	1	1	2	-	-	-	-	100.0%	100.0%	100.0%
1980	0	0	0	1	1	2	4	-	-	-	100.0%	100.0%	100.0%	100.0%
1981	0	0	0	0	1	2	3	-	-	-	-	100.0%	100.0%	100.0%
1982	2	0	0	0	0	0	2	100.0%	-	-	-	-	0.0%	66.7%
1983	2	0	0	4	1	3	10	100.0%	-	-	100.0%	100.0%	75.0%	90.9%
1984	2	1	0	5	5	5	18	100.0%	100.0%	-	83.3%	100.0%	83.3%	90.0%
1985	2	0	0	2	1	12	17	66.7%	-	-	66.7%	33.3%	92.3%	77.3%
1986	5	0	0	14	2	8	29	71.4%	-	-	93.3%	100.0%	80.0%	85.3%
1987	4	0	0	17	4	7	32	100.0%	-	-	81.0%	66.7%	87.5%	82.1%
1988	5	2	0	19	5	11	42	100.0%	66.7%	-	90.5%	83.3%	64.7%	80.8%
1989	8	1	0	13	7	21	50	100.0%	100.0%	-	68.4%	70.0%	84.0%	79.4%
1990	3	0	0	30	13	36	82	60.0%	-	-	76.9%	100.0%	75.0%	78.1%
1991	4	1	1	27	9	57	99	100.0%	100.0%	100.0%	81.8%	100.0%	87.7%	87.6%
1992	5	0	0	26	25	60	116	100.0%	-	-	86.7%	86.2%	77.9%	82.3%
1993	7	0	0	32	56	123	218	87.5%	0.0%	-	91.4%	94.9%	82.6%	86.5%
1994	17	9	0	61	62	152	301	81.0%	90.0%	-	79.2%	80.5%	80.0%	80.3%
1995	23	4	0	87	105	252	471	74.2%	100.0%	-	82.1%	77.2%	85.4%	82.3%
1996	25	2	0				27	71.4%	100.0%	-				73.0%
1997	44	3	1				48	71.0%	50.0%	100.0%				69.6%
1998	33	6	0				39	82.5%	100.0%	-				84.8%
1999	40	5	1				46	74.1%	50.0%	50.0%				69.7%
2000	59	6	2				67	75.6%	66.7%	100.0%				75.3%
2001	51	9	1				61	68.9%	90.0%	100.0%				71.8%
2002	67	8	0				75	76.1%	80.0%	-				76.5%
2003	55	12	2				69	77.5%	100.0%	66.7%				80.2%
2004	40	3	0				43	83.3%	75.0%	0.0%				81.1%
2005	23	10	1				34	74.2%	90.9%	50.0%				77.3%
2006	21	1	0				22	91.3%	33.3%	0.0%				81.5%
2007	7	3	1				11	100.0%	75.0%	100.0%				91.7%
2008			2				2			100.0%				100.0%
2009			0				0			-				-
2010			0				0			-				-
2011			4				4			100.0%				100.0%
2012			0				0			-				-
Total	556	86	16	338	298	753	2,047	77.2%	79.6%	76.2%	82.4%	82.8%	82.4%	80.8%

(v) Initially failed vehicles receiving a waiver:

Table (a) (2) (v)

Model	Number of Vehicles							% of Waivers						
Year	HDGT1	HDGT2	HDGT3	LDGT1	LDGT2	LDGV	Total	HDGT1	HDGT2	HDGT3	LDGT1	LDGT2	LDGV	Total
1977	0	0	0	0	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1978	0	0	0	0	1	0	1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1979	0	0	0	0	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1980	0	0	0	0	0	0	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1981	0	0	0	0	0	1	1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1982	0	0	0	1	1	1	3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1983	0	0	0	0	0	1	1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1984	1	0	0	1	0	4	6	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1985	3	0	0	4	2	1	10	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
1986	2	0	0	2	1	6	11	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
1987	0	0	0	10	2	5	17	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%
1988	1	1	2	2	2	9	17	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%
1989	1	0	0	9	7	7	24	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%
1990	4	0	0	10	2	17	33	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.2%
1991	0	0	0	15	1	20	36	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.2%
1992	0	0	0	5	5	32	42	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%
1993	2	1	0	8	11	57	79	0.0%	0.0%	0.0%	0.0%	0.1%	0.3%	0.5%
1994	8	2	0	28	32	65	135	0.0%	0.0%	0.0%	0.2%	0.2%	0.4%	0.8%
1995	15	4	0	39	55	82	195	0.1%	0.0%	0.0%	0.2%	0.3%	0.5%	1.2%

Table (a) (2) (v) Cont'd

Model	Number of Vehicles							% of Waivers					
Year	HDGT1	HDGT2	HDGT3	LDGT1	LDGT2	LDGV	Total	HDGT1	HDGT2	HDGT3	LDGT1	LDGT2	LDGV
1996	19	0	0	154	105	353	631	0.1%	0.0%	0.0%	0.9%	0.6%	2.1%
1997	22	4	0	309	122	556	1,013	0.1%	0.0%	0.0%	1.8%	0.7%	3.3%
1998	16	2	0	268	127	695	1,108	0.1%	0.0%	0.0%	1.6%	0.8%	4.1%
1999	18	6	1	332	242	904	1,503	0.1%	0.0%	0.0%	2.0%	1.4%	5.4%
2000	30	4	0	472	214	1,171	1,891	0.2%	0.0%	0.0%	2.8%	1.3%	7.0%
2001	30	2	0	683	285	1,180	2,180	0.2%	0.0%	0.0%	4.1%	1.7%	7.0%
2002	33	2	1	608	218	978	1,840	0.2%	0.0%	0.0%	3.6%	1.3%	5.8%
2003	31	0	1	560	312	870	1,774	0.2%	0.0%	0.0%	3.3%	1.9%	5.2%
2004	22	1	1	453	240	538	1,255	0.1%	0.0%	0.0%	2.7%	1.4%	3.2%
2005	10	1	1	479	161	519	1,171	0.1%	0.0%	0.0%	2.8%	1.0%	3.1%
2006	4	2	1	318	156	353	834	0.0%	0.0%	0.0%	1.9%	0.9%	2.1%
2007	1	1	0	151	103	247	503	0.0%	0.0%	0.0%	0.9%	0.6%	1.5%
2008	17	2	0	77	55	145	296	0.1%	0.0%	0.0%	0.5%	0.3%	0.9%
2009	7	0	0	19	18	50	94	0.0%	0.0%	0.0%	0.1%	0.1%	0.3%
2010	2	0	0	19	17	42	80	0.0%	0.0%	0.0%	0.1%	0.1%	0.2%
2011	4	0	0	4	6	10	24	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
2012	3	1	0	2	1	6	13	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	306	36	8	5,042	2,504	8,925	16,821	1.8%	0.2%	0.0%	30.0%	14.9%	53.1%

(vi) Vehicles with no known final outcome (regardless of reason):

Model	Number of Vehicles							% of Initial Fails						
Year	HDGT1	HDGT2	HDGT3	LDGT1	LDGT2	LDGV	Total	HDGT1	HDGT2	HDGT3	LDGT1	LDGT2	LDGV	Total
1977	1	0	0	0	1	0	2	25.0%	-	-	-	50.0%	0.0%	25.0%
1978	0	1	0	1	1	3	6	-	100.0%	-	50.0%	12.5%	33.3%	30.0%
1979	2	0	0	0	3	2	7	50.0%	-	-	0.0%	50.0%	15.4%	28.0%
1980	0	1	0	0	0	1	2	-	100.0%	-	0.0%	0.0%	20.0%	18.2%
1981	0	0	0	4	0	3	7	0.0%	-	-	57.1%	0.0%	30.0%	31.8%
1982	0	0	0	1	2	2	5	0.0%	0.0%	-	20.0%	40.0%	33.3%	25.0%
1983	1	0	0	0	2	4	7	16.7%	-	-	0.0%	28.6%	20.0%	14.9%
1984	1	1	0	9	2	10	23	12.5%	50.0%	-	25.7%	20.0%	25.6%	24.5%
1985	5	0	0	6	2	8	21	29.4%	-	-	19.4%	11.8%	16.3%	18.4%
1986	3	0	0	11	8	16	38	14.3%	-	-	19.3%	28.6%	22.2%	21.3%
1987	2	1	0	11	3	18	35	11.8%	25.0%	-	14.7%	11.5%	24.7%	17.9%
1988	6	2	0	10	4	21	43	23.1%	15.4%	0.0%	13.3%	14.3%	22.6%	18.1%
1989	5	0	0	20	7	30	62	14.3%	0.0%	-	19.0%	10.4%	22.7%	18.2%
1990	11	1	0	19	6	46	83	34.4%	33.3%	0.0%	13.6%	10.9%	21.2%	18.5%
1991	5	0	1	25	12	58	101	20.0%	0.0%	50.0%	14.7%	20.0%	17.7%	17.2%
1992	5	0	0	23	27	79	134	20.8%	0.0%	-	15.1%	18.1%	18.0%	17.5%
1993	5	3	0	43	60	146	257	13.2%	60.0%	-	18.2%	23.0%	20.1%	20.3%
1994	13	5	0	67	84	164	333	17.6%	19.2%	0.0%	16.5%	20.1%	18.6%	18.4%
1995	35	2	0	87	116	291	531	23.5%	8.7%	-	15.6%	20.8%	20.2%	19.4%

Table (a) (2) (vi) Cont'd

Model	Number of Vehicles							% of Initial Fails						
Year	HDGT1	HDGT2	HDGT3	LDGT1	LDGT2	LDGV	Total	HDGT1	HDGT2	HDGT3	LDGT1	LDGT2	LDGV	Total
1996	38	4	0	394	219	892	1,547	26.0%	25.0%	-	31.6%	34.7%	33.0%	32.6%
1997	40	8	0	627	311	1,174	2,160	18.3%	30.8%	0.0%	31.1%	34.9%	31.6%	31.4%
1998	29	2	0	605	322	1,445	2,403	18.6%	9.5%	-	28.8%	35.5%	30.7%	30.4%
1999	46	0	1	657	564	1,774	3,042	19.4%	0.0%	25.0%	28.0%	32.9%	30.9%	30.2%
2000	63	0	1	849	473	2,302	3,688	17.5%	0.0%	14.3%	26.6%	31.4%	30.4%	29.1%
2001	62	6	2	1,061	501	2,154	3,786	19.4%	15.0%	28.6%	26.1%	27.9%	29.7%	28.1%
2002	36	5	1	1,068	444	2,030	3,584	11.7%	15.2%	20.0%	25.3%	28.7%	28.9%	27.3%
2003	48	8	0	901	544	1,721	3,222	13.9%	22.2%	0.0%	23.5%	24.9%	28.0%	25.7%
2004	25	4	0	845	440	1,292	2,606	9.7%	16.0%	0.0%	24.3%	24.2%	27.1%	25.2%
2005	22	4	0	745	346	1,112	2,229	12.6%	12.5%	0.0%	22.3%	23.9%	24.2%	23.2%
2006	19	4	1	548	254	974	1,800	15.2%	16.0%	12.5%	23.7%	21.3%	24.4%	23.5%
2007	5	0	5	287	222	639	1,158	9.3%	0.0%	41.7%	20.1%	21.3%	23.4%	21.9%
2008	45	8	0	150	147	419	769	23.1%	34.8%	0.0%	19.4%	19.6%	21.9%	21.0%
2009	13	1	0	71	38	210	333	14.9%	5.6%	0.0%	18.6%	13.3%	22.4%	19.4%
2010	14	2	0	41	41	170	268	21.2%	28.6%	0.0%	14.9%	15.1%	19.8%	18.1%
2011	12	1	0	24	12	74	123	16.4%	12.5%	0.0%	16.2%	9.7%	16.9%	15.4%
2012	5	1	0	16	20	89	131	12.5%	8.3%	-	15.2%	19.4%	19.5%	18.3%
Total	622	75	12	9,226	5,238	19,373	34,546	17.1%	15.9%	13.8%	24.7%	26.3%	27.6%	26.3%

(See notes on Table (a) (2) (vi) below)

Notes on Table (a) (2) (vi):

The number of vehicles that failed the initial test and had no final outcome must be considered in the full and proper perspective of the VEIP procedures and the I/M reporting requirements. There are several critical factors to bear in mind:

1. Maryland's VEIP is a biennial program. The Calendar Year 2014 report covers only one half of a full VEIP test cycle.

2. Reported percentages of vehicles with no final outcome are based on the number of vehicles that failed an initial tailpipe emissions (Idle) or OBD test. Vehicles that do have a known final outcome include those that passed a retest or received a waiver, as well as vehicles that were sold, scrapped, moved out of the VEIP area, cancelled the registration, etc.

3. Not all vehicles that failed an initial test in 2014, especially late in the year, will achieve a final outcome by the end of the calendar year. Many vehicles that failed an initial test in 2014 continue to return for retesting after 12/31/14. The number of vehicles reported as having no known final outcome for calendar year 2014 includes results through 6/30/15. The totals include vehicles that have received extensions or have taken failing retests and may not have returned yet.

4. There are several factors that can contribute to the amount of time taken for vehicles to achieve a final outcome after failing an inspection, including:
   - The Maryland VEIP Statute provides motorists up to 120 days (about 4 months) to have their vehicle repaired and return for a retest;
   - Multiple retests are sometimes necessary before passing a retest;
   - Motorists can be granted up to two 120-day extensions (cumulatively, nearly up to 1 year);
   - Motorists sometimes arrive late for scheduled retests (although they must pay a late fee), which extends the time taken to achieve a final outcome.

   Combining these factors, some vehicles can take more than a year to reach a final outcome.

5. In 2009, Maryland compared a sample of 2,000 vehicles documented as failing VEIP testing with no subsequent passing test or waiver granted as of August 27, 2008 with AutoCheck and Maryland vehicle databases. In order to maximize final outcomes, VINs with latest due dates from May 2005 through December 2007 were sampled. The results showed that 93% of the vehicles were found to be scrapped, auctioned out of state, titled in another state, sold and not retitled, no longer registered in Maryland (including suspensions), exempt, receiving a senior or disabled motorist waiver, or in compliance by passing a subsequent retest. The remaining 7% of vehicles were found to be back in the testing process with unresolved final outcomes as of April 1, 2009. Application of this result to the 2014 data reduces the number of vehicles with no final outcome by 93% to approximately 2%.

vii) - (x) Reserved

(xi) Passing the on-board diagnostic check:

1,344,831 vehicles passed the initial OBD check (1996 and newer LDGV, LDGT1, and LDGT2 and 2008 and newer HDGT1 and HDGT2)

(xii) Failing the on-board diagnostic check:

119,561 vehicles failed the initial OBD check

(xiii) Failing the on-board diagnostic check and passing the tailpipe test (if applicable):

None. (OBD vehicles do not receive an idle test)

(xiv) Failing the on-board diagnostic check and failing the tailpipe test (if applicable):

None. (OBD vehicles do not receive an idle test)

(xv) Passing the on-board diagnostic check and failing the I/M gas cap evaporative system test (if applicable):

None. (OBD vehicles do not receive a gas cap test)

(xvi) Failing the on-board diagnostic check and passing the I/M gas cap evaporative system test (if applicable):

None. (OBD vehicles do not receive a gas cap test)

(xvii) Passing both the on-board diagnostic check and I/M gas cap evaporative system test (if applicable):

None. (OBD vehicles do not receive a gas cap test)

(xviii) Failing both the on-board diagnostic check and I/M gas cap evaporative system test (if applicable):

None (OBD vehicles do not receive a gas cap test)

(xix) MIL is commanded on and no codes are stored (includes initial tests and retests):

Table (a) (2) (xix)

Model	Number of Vehicles						Percent of All OBD					
Year	HDGT 1	HDGT 2	LDGT 1	LDGT 2	LDGV	Total	HDGT 1	HDGT 2	LDGT 1	LDGT 2	LDGV	Total
1996			0	2	14	16			0.0%	0.0%	0.1%	0.0%
1997			0	1	1	2			0.0%	0.0%	0.0%	0.0%
1998			1	0	2	3			0.0%	0.0%	0.0%	0.0%
1999			24	13	3	40			0.1%	0.1%	0.0%	0.1%
2000			8	9	2	19			0.0%	0.1%	0.0%	0.0%
2001			1	7	9	17			0.0%	0.0%	0.0%	0.0%
2002			0	0	29	29			0.0%	0.0%	0.0%	0.0%
2003			11	0	19	30			0.0%	0.0%	0.0%	0.0%
2004			0	1	9	10			0.0%	0.0%	0.0%	0.0%
2005			16	0	10	26			0.0%	0.0%	0.0%	0.0%
2006			23	0	3	26			0.1%	0.0%	0.0%	0.0%
2007			8	3	4	15			0.0%	0.0%	0.0%	0.0%
2008	0	0	5	0	3	8	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2009	0	0	1	0	0	1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2010	0	0	4	0	7	11	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2011	0	0	0	0	2	2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2012	0	0	1	1	0	2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	0	0	103	37	117	257	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

(xx) MIL is not commanded on and codes are stored (includes initial tests and retests):

Table (a) (2) (xx)

Model	Number of Vehicles						Percent of All OBD					
Year	HDGT 1	HDGT 2	LDGT 1	LDGT 2	LDGV	Total	HDGT 1	HDGT 2	LDGT 1	LDGT 2	LDGV	Total
1996			1,076	455	1,839	3,370			11.4%	10.2%	8.7%	9.6%
1997			1,709	490	2,465	4,664			10.7%	8.0%	8.5%	9.1%
1998			1,867	720	3,211	5,798			10.7%	10.4%	8.9%	9.6%
1999			1,893	1,264	4,031	7,188			9.4%	9.4%	9.1%	9.2%
2000			3,203	1,011	4,790	9,004			11.6%	7.8%	8.3%	9.2%
2001			2,525	1,219	5,547	9,291			8.0%	7.8%	9.7%	8.9%
2002			3,813	1,354	6,608	11,775			9.8%	8.1%	10.5%	9.9%
2003			3,970	1,709	6,052	11,731			9.9%	7.9%	9.4%	9.3%
2004			4,695	1,654	5,756	12,105			10.4%	7.5%	9.1%	9.2%
2005			4,199	1,207	5,557	10,963			8.7%	6.3%	8.7%	8.4%
2006			3,767	1,332	5,404	10,503			8.5%	7.6%	7.5%	7.9%
2007			2,564	1,062	4,241	7,867			6.8%	6.0%	6.3%	6.4%
2008	145	24	1,514	1,132	3,204	6,019	4.2%	6.7%	4.3%	5.3%	4.3%	4.4%
2009	76	13	524	524	1,430	2,567	4.5%	6.2%	2.6%	5.1%	2.9%	3.1%
2010	92	13	670	671	1,469	2,915	4.9%	6.6%	2.0%	3.9%	2.1%	2.4%
2011	77	4	284	338	841	1,544	2.4%	1.4%	1.0%	1.9%	1.7%	1.6%
2012	38	30	305	272	1,102	1,747	1.3%	1.8%	0.9%	1.4%	1.3%	1.3%
Total	428	84	38,578	16,414	63,547	119,051	3.2%	3.1%	7.3%	6.3%	6.6%	6.7%

(xxi) MIL is commanded on and codes are stored (includes initial tests and retests):

Table (a) (2) (xxi)

Model	Number of Vehicles						Percent of All OBD					
Year	HDGT 1	HDGT 2	LDGT 1	LDGT 2	LDGV	Total	HDGT 1	HDGT 2	LDGT 1	LDGT 2	LDGV	Total
1996			2,936	1,439	5,942	10,317			31.2%	32.2%	28.2%	29.5%
1997			4,712	2,000	8,115	14,827			29.6%	32.6%	27.9%	29.0%
1998			4,564	2,109	10,251	16,924			26.0%	30.3%	28.4%	28.0%
1999			4,966	4,048	12,505	21,519			24.7%	30.0%	28.2%	27.6%
2000			6,843	3,396	16,257	26,496			24.7%	26.3%	28.2%	26.9%
2001			8,920	4,133	15,760	28,813			28.2%	26.6%	27.6%	27.7%
2002			8,837	3,384	14,098	26,319			22.7%	20.2%	22.3%	22.1%
2003			7,648	4,194	12,242	24,084			19.0%	19.3%	19.0%	19.1%
2004			6,268	3,217	9,091	18,576			13.8%	14.5%	14.3%	14.2%
2005			6,180	2,625	8,457	17,262			12.8%	13.6%	13.3%	13.2%
2006			3,957	2,001	6,571	12,529			8.9%	11.4%	9.2%	9.4%
2007			2,339	1,703	4,400	8,442			6.2%	9.6%	6.6%	6.9%
2008	264	29	1,104	1,092	2,894	5,383	7.7%	8.1%	3.1%	5.1%	3.9%	4.0%
2009	134	23	545	394	1,390	2,486	7.9%	11.0%	2.7%	3.8%	2.8%	3.0%
2010	88	8	296	309	1,014	1,715	4.7%	4.0%	0.9%	1.8%	1.4%	1.4%
2011	91	9	139	131	481	851	2.8%	3.2%	0.5%	0.8%	1.0%	0.9%
2012	38	12	102	100	407	659	1.3%	0.7%	0.3%	0.5%	0.5%	0.5%
Total	615	81	70,356	36,275	129,875	237,202	4.7%	3.0%	13.3%	13.9%	13.5%	13.4%

(xxii) MIL is not commanded on and codes are not stored (includes initial tests and retests):

Table (a) (2) (xxii)

Model	Number of Vehicles						Percent of All OBD					
Year	HDGT 1	HDGT 2	LDGT 1	LDGT 2	LDGV	Total	HDGT 1	HDGT 2	LDGT 1	LDGT 2	LDGV	Total
1996			5,377	2,559	11,129	19,065			57.1%	57.2%	52.9%	54.6%
1997			9,450	3,616	16,227	29,293			59.3%	58.9%	55.8%	57.3%
1998			11,035	4,099	21,531	36,665			63.0%	59.0%	59.8%	60.6%
1999			13,139	8,137	26,476	47,752			65.4%	60.3%	59.7%	61.3%
2000			17,502	8,456	35,268	61,226			63.3%	65.5%	61.1%	62.3%
2001			20,102	10,120	34,493	64,715			63.6%	65.1%	60.5%	62.1%
2002			26,240	11,964	41,093	79,297			67.3%	71.4%	65.0%	66.7%
2003			28,561	15,794	45,712	90,067			70.9%	72.6%	71.0%	71.2%
2004			34,234	17,212	48,369	99,815			75.6%	77.8%	76.2%	76.3%
2005			37,718	15,419	49,348	102,485			78.2%	79.9%	77.6%	78.2%
2006			36,659	14,272	59,392	110,323			82.4%	81.0%	82.9%	82.5%
2007			32,550	14,988	57,941	105,479			86.7%	84.3%	86.6%	86.3%
2008	3,019	304	32,682	19,237	68,681	123,923	87.7%	85.2%	92.5%	89.5%	91.6%	91.4%
2009	1,479	172	19,180	9,371	46,176	76,378	87.4%	82.3%	94.7%	91.0%	94.0%	93.6%
2010	1,705	176	32,615	16,130	68,091	118,717	90.3%	88.9%	97.0%	94.2%	96.3%	96.1%
2011	3,052	271	28,474	16,939	46,829	95,565	94.4%	95.4%	98.4%	97.2%	97.0%	97.4%
2012	2,845	1,650	32,236	18,768	81,102	136,601	97.1%	97.5%	98.7%	98.0%	98.0%	98.2%
Total	12,100	2,573	417,754	207,081	757,858	1,397,366	91.8%	93.9%	79.1%	79.5%	78.6%	79.0%

(xxiii) Readiness status indicates that the evaluation is not complete for any module supported by on-board diagnostic systems (includes initial tests and retests):

Table (a) (2) (xxiii)

Model	Number of Vehicles						Percent of All OBD					
Year	HDGT 1	HDGT 2	LDGT 1	LDGT 2	LDGV	Total	HDGT 1	HDGT 2	LDGT 1	LDGT 2	LDGV	Total
1996			4,632	1,984	9,835	16,451			49.2%	44.3%	46.7%	47.1%
1997			7,918	2,956	12,333	23,207			49.7%	48.2%	42.4%	45.4%
1998			7,401	3,161	13,798	24,360			42.2%	45.5%	38.3%	40.3%
1999			8,162	7,233	16,129	31,524			40.6%	53.6%	36.3%	40.4%
2000			9,957	5,412	20,352	35,721			36.0%	41.9%	35.2%	36.3%
2001			11,254	5,878	17,985	35,117			35.6%	37.8%	31.5%	33.7%
2002			10,531	4,605	14,931	30,067			27.0%	27.5%	23.6%	25.3%
2003			9,326	6,899	13,460	29,685			23.2%	31.7%	20.9%	23.5%
2004			7,021	5,299	10,231	22,551			15.5%	23.9%	16.1%	17.2%
2005			8,382	3,474	9,099	20,955			17.4%	18.0%	14.3%	16.0%
2006			5,611	3,274	7,495	16,380			12.6%	18.6%	10.5%	12.2%
2007			3,093	2,933	5,296	11,322			8.2%	16.5%	7.9%	9.3%
2008	414	58	1,622	1,764	3,949	7,807	12.0%	16.2%	4.6%	8.2%	5.3%	5.8%
2009	267	54	762	965	2,576	4,624	15.8%	25.8%	3.8%	9.4%	5.2%	5.7%
2010	169	21	858	798	2,488	4,334	9.0%	10.6%	2.6%	4.7%	3.5%	3.5%
2011	269	29	772	571	1,502	3,143	8.3%	10.2%	2.7%	3.3%	3.1%	3.2%
2012	101	62	521	398	1,641	2,723	3.4%	3.7%	1.6%	2.1%	2.0%	2.0%
Total	1,220	224	97,823	57,604	163,100	319,971	9.3%	8.2%	18.5%	22.1%	16.9%	18.1%

Note: Includes vehicles with any and all (continuous and non-continuous) readiness monitors not complete. Data are <u>not</u> adjusted for allowable 1 or 2 unset readiness monitors per EPA OBD guidance

(3) The initial test volume by model year and test station:

Table (a) (3)

Model Year	Centralized Stations																		
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**Total**
1977		5	6	4	3	1	1	2		6	4	3	4	2	1	1	4	1	48
1978	1	5	3	2	6	3	4	6	6	4	13	4	7	2	5	1	4	3	79
1979	1	6	5	5	8	2	4	4	9	4	11	10	11	2	4	1	2	2	91
1980		3		4	6	2	5	4	2	6	5	2	6	2	6	2	2	2	59
1981		3	6	4	8	4	3	2	5	7	9	7	4	3			1	3	69
1982		3	4	2	8		4	8	5	10	14	9	6	2	5	1	3	6	90
1983	2	5	4	4	8	8	9	4	6	14	15	15	10	9	14	3	6	4	140
1984	5	18	12	8	32	15	9	9	12	25	18	23	23	18	16	6	18	4	271
1985	5	23	14	14	34	15	23	14	23	38	56	57	33	24	22	5	16	11	427
1986	9	30	46	32	59	27	27	36	39	69	102	56	48	38	49	11	29	20	727
1987	15	48	66	54	68	37	54	51	42	137	120	94	89	56	65	33	40	31	1,100
1988	17	97	95	67	123	65	61	53	73	165	164	148	129	90	90	36	58	51	1,582
1989	33	131	106	105	185	73	96	118	96	214	228	213	161	123	128	48	100	50	2,208
1990	48	145	176	118	197	78	120	111	122	342	283	272	184	150	132	62	92	96	2,728
1991	51	155	212	114	279	156	145	156	217	482	442	383	256	214	198	110	167	79	3,816
1992	53	223	275	153	402	213	175	185	192	614	488	524	405	239	243	129	219	129	4,861
1993	89	333	398	276	631	328	335	428	416	1,048	833	729	574	411	470	226	310	182	8,017
1994	138	548	686	446	1,043	514	497	551	521	1,488	1,196	1,164	826	656	676	321	520	297	12,088
1995	272	832	1,087	809	1,928	917	931	1,048	990	2,517	2,094	1,878	1,338	1,065	1,234	518	799	575	20,832
1996	263	773	1,106	770	2,037	982	1,064	1,086	1,071	2,629	2,091	1,870	1,339	1,017	1,230	499	830	561	21,218
1997	353	1,150	1,708	1,178	3,147	1,553	1,708	1,716	1,624	3,886	3,129	2,716	1,972	1,628	1,958	750	1,196	813	32,185
1998	393	1,301	2,004	1,345	3,653	1,847	2,151	1,955	2,133	4,792	3,950	3,348	2,240	2,014	2,300	811	1,403	996	38,636
1999	552	1,760	2,768	1,770	4,861	2,531	2,933	2,517	2,910	6,316	5,432	4,268	3,084	2,688	2,930	1,071	1,853	1,254	51,498
2000	737	2,039	3,511	2,234	6,424	3,173	3,957	3,381	4,058	8,089	7,515	5,601	3,815	3,452	3,862	1,421	2,313	1,546	67,128
2001	787	2,184	3,848	2,447	6,829	3,288	4,336	3,836	4,327	8,503	7,712	5,743	4,089	3,780	4,048	1,428	2,535	1,744	71,464
2002	994	2,603	4,888	3,168	8,175	3,985	5,663	4,882	6,128	10,304	10,311	7,009	4,822	5,180	5,228	1,910	3,332	2,119	90,701
2003	1,108	2,897	5,610	3,354	9,348	4,500	6,534	5,560	6,814	11,046	10,971	7,584	5,520	5,657	5,747	2,058	3,669	2,303	100,280
2004	1,207	3,216	6,266	3,744	9,720	4,518	7,800	6,261	8,356	12,025	13,682	8,126	6,057	6,748	6,382	2,290	4,013	2,405	112,816
2005	1,171	3,176	6,442	3,845	10,033	4,799	7,720	6,539	8,230	11,288	12,453	7,961	6,006	6,596	6,430	2,392	4,167	2,647	111,895
2006	1,297	3,241	6,899	3,916	10,460	5,012	8,727	7,132	9,649	12,333	14,517	8,374	6,761	7,387	7,009	2,426	4,539	2,543	122,222
2007	1,276	2,883	6,194	3,677	10,012	4,810	8,447	6,968	9,075	10,920	13,061	7,635	6,126	7,008	6,496	2,211	4,311	2,483	113,593
2008	1,388	3,332	6,966	4,153	11,039	5,138	9,954	8,194	10,992	11,805	15,669	7,740	6,248	8,236	7,388	2,686	4,697	2,694	128,319
2009	822	1,896	4,182	2,363	6,887	3,094	5,944	4,858	6,704	7,510	9,418	4,763	3,845	4,965	4,459	1,562	2,794	1,670	77,736
2010	1,198	2,774	6,459	3,827	9,524	4,563	9,484	7,660	11,033	11,626	16,069	6,658	5,537	7,965	6,701	2,665	4,345	2,371	120,459
2011	1,039	2,273	5,366	2,893	7,923	3,827	7,347	5,864	8,212	8,912	12,370	5,809	5,183	5,884	5,383	1,994	3,637	2,085	96,001
2012	1,527	3,583	8,095	4,519	10,976	4,879	11,332	9,351	12,639	11,809	18,037	7,024	5,915	8,836	8,075	2,959	4,860	3,180	137,596
Total	16,851	43,694	85,513	51,424	136,076	64,957	107,604	90,550	116,731	160,983	182,482	107,820	82,673	92,147	88,984	32,647	56,884	34,960	1,552,980

Self Testing Fleets

Model Year	S131 U1	S132 U1	S132 U2	S133 U1	S134 U1	S135 U1	S135 U2	S136 U1	S136 U2	S137 U1	S137 U2	S138 U1	S139 U1	S142 U1	Total
1983					1										1
1988				2										1	3
1989				1											1
1990				1										1	2
1991														1	1
1992				1	1									1	3
1993				6										1	7
1994	1			3	1			3		1				7	16
1995	2	1			2							4		7	16
1996		1		1	3						1			11	17
1997	4	2	2	3	2			1		2		1		11	28
1998	2	4	2	8	5			2		8	6	2		16	55
1999	3	12	4	2	4	2	2	8		1	1	1		19	59
2000	17	7	8	9	26	1	1	3		6	3			16	97
2001	11	16	8		14	1	2	14		2	1			14	83
2002	5	16	3	13	61			5				4	1	18	126
2003	9	29	9	2	47	4	3	14	2	1		3		18	141
2004	7	56	18	10	65	1	10	30	2			4	1	11	215
2005	27	81	22	6	47	3	36	46	12	1		6		16	303
2006	47	121	52	10	123	7	51	88	21	15	3	13	13	56	620
2007	117	50	13	8	49	2	12	92	7	4		20		30	404
2008	130	72	22	41	126	16	89	144	53	9	6	6	12	39	765
2009	144	1		15	34	3	13					8	7		225
2010	94	32	7	37	86	9	45	84	37	2		4	2	7	446
2011	134	19	7	4	11	1	14	25	8	3	3		8	22	259
2012	5	9	1	8	48	4	70	87	31	4	4	5	8	22	306
Total	759	529	178	191	756	54	348	646	173	59	28	81	52	345	4,199

Model Year	S140 U1	S140 U10	S140 U11	S140 U12	S140 U2	S140 U3	S140 U4	S140 U5	S140 U6	S140 U7	S140 U8	S141 U1	S141 U10	S141 U2	S141 U3	S141 U4	S141 U5	S141 U6	S141 U7	S141 U8	S141 U9	Total
1997	1				1			1			1						1			3	1	9
1999			1				1		1	1				1	2		1		1	1		10
2000	1		1	1	1		3	1		1	1	1		1		1	1		3	1	2	20
2002	1	1			2				1			3	1	1		1				1		12
2003	2			1			1				2		1		2		1		1			11
2004	3				2	2	1	1			1	1		1		1	1			2		16
2005	4		3	2	1	3	2	3	1		3		1	1	1	1	1	1	1	3		32
2006	2	2	6	3	3			1	1	1		1	3			4	2			5	3	37
2007	4	2	1		2	1	2		3					2	2	4		1		4	2	30
2008	1	5	1	4	1	2	3	3	2	3	4		1	1	1	3	2	1	4	2	2	46
2009	1	2	3	1	1	2	3	6	1	4	1	1	2		3	1	5	1	3	4	2	47
2010	5	12	2	1	1	1		6	3		1			6		1	1		4	1	8	53
2011	23	12	5	3	12	4	13	1	1	10	3	6	4	5		5	9			8	6	130
2012			3	1	2		2			1		1	2	3		1			4	1	1	22
Total	48	36	26	17	29	15	31	23	14	21	17	14	15	22	11	23	25	4	21	36	27	475

(4) The initial test failure rate by model year and test station (Idle and OBD failures):

Table (a) (4)

Model	Centralized Stations																		
Year	1	2	3	4	5	6	7	8	9	11	12	13	14	15	16	17	18	19	Total
1977	-	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	50.0%	-	33.3%	0.0%	0.0%	0.0%	0.0%	100%	100%	25.0%	100.0%	16.7%
1978	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	25.0%	50.0%	16.7%	25.0%	23.1%	75.0%	14.3%	0.0%	40.0%	0.0%	75.0%	33.3%	25.3%
1979	100.0%	33.3%	40.0%	40.0%	12.5%	0.0%	0.0%	25.0%	22.2%	75.0%	18.2%	30.0%	54.5%	0.0%	0.0%	0.0%	0.0%	0.0%	27.5%
1980	-	33.3%	-	25.0%	16.7%	0.0%	0.0%	25.0%	0.0%	33.3%	20.0%	0.0%	33.3%	0.0%	33.3%	0.0%	0.0%	0.0%	18.6%
1981	-	33.3%	33.3%	50.0%	25.0%	25.0%	33.3%	0.0%	60.0%	42.9%	11.1%	42.9%	25.0%	33.3%	-	-	0.0%	33.3%	31.9%
1982	-	33.3%	25.0%	0.0%	0.0%	-	25.0%	25.0%	20.0%	10.0%	28.6%	22.2%	0.0%	50.0%	40.0%	0.0%	66.7%	33.3%	22.2%
1983	0.0%	0.0%	0.0%	0.0%	12.5%	75.0%	66.7%	25.0%	33.3%	42.9%	0.0%	53.3%	40.0%	44.4%	42.9%	33.3%	33.3%	0.0%	33.6%
1984	20.0%	38.9%	25.0%	37.5%	31.3%	26.7%	33.3%	33.3%	41.7%	44.0%	33.3%	52.2%	26.1%	22.2%	43.8%	33.3%	33.3%	25.0%	34.7%
1985	20.0%	21.7%	57.1%	14.3%	20.6%	33.3%	21.7%	28.6%	13.0%	21.1%	23.2%	26.3%	36.4%	25.0%	45.5%	0.0%	43.8%	27.3%	26.7%
1986	11.1%	20.0%	30.4%	9.4%	33.9%	48.1%	22.2%	19.4%	20.5%	17.4%	22.5%	32.1%	25.0%	26.3%	22.4%	0.0%	31.0%	25.0%	24.5%
1987	13.3%	20.8%	15.2%	18.5%	10.3%	21.6%	13.0%	7.8%	23.8%	16.1%	18.3%	27.7%	18.0%	17.9%	16.9%	15.2%	22.5%	19.4%	17.7%
1988	17.6%	12.4%	14.7%	13.4%	14.6%	13.8%	19.7%	15.1%	8.2%	18.8%	14.6%	16.2%	17.8%	8.9%	15.6%	16.7%	20.7%	7.8%	15.0%
1989	12.1%	11.5%	11.3%	10.5%	9.2%	13.7%	8.3%	21.2%	13.5%	18.7%	13.6%	21.6%	15.5%	17.1%	21.1%	16.7%	17.0%	22.0%	15.4%
1990	27.1%	12.4%	11.4%	14.4%	16.2%	20.5%	13.3%	10.8%	15.6%	15.5%	16.3%	22.1%	19.6%	12.0%	18.2%	12.9%	21.7%	20.8%	16.4%
1991	13.7%	18.1%	13.2%	14.0%	19.4%	17.9%	14.5%	13.5%	13.4%	14.5%	13.8%	18.5%	14.5%	17.8%	13.1%	12.7%	15.6%	16.5%	15.4%
1992	13.2%	12.6%	10.9%	12.4%	14.9%	18.8%	16.0%	11.4%	13.5%	16.8%	15.0%	20.2%	17.5%	13.0%	19.3%	10.1%	20.1%	14.7%	15.8%
1993	11.2%	12.9%	11.8%	13.4%	16.5%	19.8%	11.9%	10.7%	14.4%	15.7%	15.1%	22.1%	18.6%	16.5%	16.8%	13.7%	18.4%	11.5%	15.8%
1994	13.8%	10.0%	10.8%	12.1%	17.4%	15.4%	14.5%	11.6%	17.3%	16.4%	15.7%	17.0%	13.9%	13.7%	15.7%	15.3%	16.9%	14.1%	15.0%
1995	10.3%	12.5%	8.8%	12.4%	13.6%	14.5%	12.6%	9.7%	13.9%	14.1%	13.1%	15.9%	13.2%	12.1%	13.5%	10.2%	16.6%	11.0%	13.1%
1996	19.8%	14.5%	17.0%	13.6%	26.3%	31.0%	21.4%	14.9%	17.6%	25.4%	18.9%	32.0%	25.7%	20.4%	21.8%	21.4%	20.8%	18.4%	22.3%
1997	19.5%	14.5%	15.3%	14.9%	24.1%	28.1%	20.4%	16.3%	18.0%	24.8%	17.8%	29.2%	26.2%	17.7%	21.6%	18.3%	22.4%	17.0%	21.4%
1998	22.4%	14.1%	12.9%	14.3%	22.9%	27.8%	18.5%	14.3%	15.4%	26.1%	16.5%	31.0%	23.8%	16.5%	18.2%	16.5%	20.7%	16.6%	20.4%
1999	19.6%	12.2%	12.7%	12.8%	22.3%	26.4%	17.5%	14.3%	15.1%	24.7%	17.5%	26.9%	25.8%	15.7%	17.8%	14.9%	19.7%	14.2%	19.5%
2000	14.2%	11.0%	13.5%	11.2%	22.5%	24.7%	18.8%	13.8%	15.5%	23.1%	15.6%	26.3%	23.4%	15.9%	18.8%	14.5%	17.8%	14.9%	18.9%
2001	18.3%	12.6%	13.0%	12.3%	22.1%	25.6%	18.2%	13.6%	16.5%	23.3%	16.9%	25.6%	22.3%	16.0%	18.5%	14.4%	17.0%	13.5%	18.9%
2002	12.5%	11.0%	9.4%	9.9%	17.8%	19.2%	14.8%	10.4%	11.9%	17.3%	12.4%	20.9%	17.6%	11.7%	14.7%	11.9%	13.3%	10.9%	14.5%
2003	11.8%	8.8%	9.1%	9.3%	14.3%	18.1%	12.1%	9.4%	10.3%	15.2%	10.5%	17.3%	15.9%	10.3%	10.9%	12.0%	12.5%	10.2%	12.5%
2004	9.4%	7.1%	6.5%	6.0%	11.2%	12.5%	8.5%	7.3%	7.1%	10.9%	6.9%	13.8%	12.3%	7.7%	9.4%	7.8%	9.9%	7.7%	9.2%
2005	7.8%	6.6%	5.6%	5.8%	10.9%	11.2%	8.0%	6.7%	6.3%	9.8%	6.6%	13.2%	12.6%	6.9%	8.5%	7.7%	9.5%	7.0%	8.6%
2006	6.6%	4.3%	4.9%	3.8%	8.3%	8.5%	5.5%	4.7%	4.6%	7.2%	4.8%	9.9%	8.5%	5.1%	6.1%	6.1%	6.8%	5.5%	6.3%
2007	4.5%	3.7%	3.2%	3.6%	6.0%	5.9%	3.7%	3.6%	3.2%	5.0%	3.3%	7.6%	7.4%	3.9%	5.1%	5.0%	5.5%	3.9%	4.7%
2008	3.2%	1.9%	2.4%	1.9%	3.6%	4.3%	2.5%	2.1%	2.1%	2.9%	2.3%	4.4%	4.6%	2.2%	3.0%	3.1%	3.4%	2.3%	2.9%
2009	2.8%	1.8%	1.4%	1.6%	2.9%	3.1%	1.9%	1.8%	1.7%	2.3%	1.5%	3.4%	3.6%	2.0%	2.3%	2.0%	2.5%	2.3%	2.2%
2010	1.9%	1.2%	1.0%	1.3%	1.8%	2.0%	0.9%	0.9%	0.9%	1.3%	0.7%	2.0%	2.1%	1.0%	1.4%	1.5%	1.3%	0.8%	1.2%
2011	1.0%	0.7%	0.4%	0.7%	0.9%	1.3%	0.8%	0.7%	0.5%	1.0%	0.7%	1.1%	1.1%	0.8%	1.2%	0.8%	0.8%	0.8%	0.8%
2012	0.5%	0.2%	0.2%	0.5%	0.7%	0.7%	0.4%	0.4%	0.3%	0.5%	0.4%	0.9%	1.1%	0.6%	0.8%	0.6%	0.6%	0.5%	0.5%
Total	8.1%	6.6%	5.8%	6.0%	10.5%	12.1%	7.1%	5.9%	5.8%	10.9%	6.6%	13.6%	11.6%	6.6%	8.4%	7.4%	8.7%	7.1%	8.5%

Self Testing Fleets

Model Year	S131 U1	S132 U1	S132 U2	S133 U1	S134 U1	S135 U1	S135 U2	S136 U1	S136 U2	S137 U1	S137 U2	S138 U1	S139 U1	S142 U1	Total
1983	-	-	-	-	0.0%	-	-	-	-	-	-	-	-	-	0.0%
1989	-	-	-	0.0%	-	-	-	-	-	-	-	-	-	0.0%	0.0%
1990	-	-	-	0.0%	-	-	-	-	-	-	-	-	-	-	0.0%
1991	-	-	-	0.0%	-	-	-	-	-	-	-	-	-	0.0%	0.0%
1992	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	0.0%
1993	-	-	-	0.0%	0.0%	-	-	-	-	-	-	-	-	0.0%	0.0%
1994	-	-	-	0.0%	-	-	-	-	-	-	-	-	-	0.0%	0.0%
1995	0.0%	-	-	0.0%	0.0%	-	-	33.3%	-	0.0%	-	-	-	0.0%	6.3%
1996	0.0%	0.0%	-	-	0.0%	-	-	-	-	-	-	0.0%	-	0.0%	12.5%
1997	-	0.0%	-	0.0%	0.0%	-	-	-	-	-	0.0%	-	-	0.0%	0.0%
1998	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	0.0%	-	0.0%	-	0.0%	-	0.0%	0.0%
1999	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	0.0%	-	13%	0.0%	0.0%	-	0.0%	1.8%
2000	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%	-	0.0%	0.0%
2001	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	16.7%	0.0%	-	-	0.0%	2.1%
2002	0.0%	0.0%	0.0%	-	7.1%	0.0%	0.0%	0.0%	-	0.0%	0.0%	-	-	0.0%	1.2%
2003	20.0%	6.3%	0.0%	0.0%	1.6%	-	-	0.0%	-	-	-	0.0%	100.0%	0.0%	3.2%
2004	0.0%	6.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	1.4%
2005	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	0.0%	0.0%	0.0%	0.0%
2006	0.0%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	1.0%
2007	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	0.0%	6.7%	0.0%	0.0%	0.0%	0.0%	0.6%
2008	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	0.5%
2009	0.0%	0.0%	0.0%	0.0%	0.0%	6.3%	1.1%	0.0%	0.0%	11.1%	0.0%	0.0%	0.0%	0.0%	0.4%
2010	0.7%	0.0%	-	0.0%	0.0%	0.0%	0.0%	-	-	-	-	12.5%	0.0%	-	0.9%
2011	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	-	0.0%	0.0%	0.0%	0.2%
2012	0.0%	0.0%	14.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%
Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Model Year	S140 U1	S140 U10	S140 U11	S140 U12	S140 U2	S140 U3	S140 U4	S140 U5	S140 U6	S140 U7	S140 U8	S141 U1	S141 U10	S141 U2	S141 U3	S141 U4	S141 U5	S141 U6	S141 U7	S141 U8	S141 U9	Total
1997	0.0%	-	-	-	0.0%	-	-	0.0%	-	-	0.0%	-	-	-	-	-	0.0%	-	-	0.0%	0.0%	0.0%
1999	-	-	0.0%	-	-	-	0.0%	-	0.0%	0.0%	-	-	-	0.0%	50.0%	-	0.0%	-	0.0%	0.0%	-	10.0%
2000	0.0%	-	0.0%	0.0%	0.0%	-	0.0%	0.0%	-	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	0.0%	-	0.0%	0.0%	0.0%	0.0%
2002	0.0%	0.0%	-	-	0.0%	-	-	-	0.0%	-	-	33.3%	0.0%	0.0%	-	0.0%	-	-	-	0.0%	-	8.3%
2003	0.0%	-	-	0.0%	-	-	0.0%	-	-	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	-	0.0%
2004	0.0%	-	-	-	0.0%	0.0%	0.0%	0.0%	-	-	0.0%	0.0%	-	0.0%	-	0.0%	0.0%	-	-	0.0%	-	0.0%
2005	0.0%	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	0.0%	0.0%	0%	0.0%	0.0%	0.0%	0.0%	-	0.0%
2006	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	0.0%	0.0%	0.0%	-	0.0%	0.0%	-	-	0.0%	0.0%	-	-	0.0%	0.0%	0.0%
2007	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%	-	0.0%	-	-	-	-	0.0%	100.0%	0.0%	-	0.0%	-	0.0%	0.0%	6.7%
2008	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2009	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2010	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	-	0%	-	-	0.0%	-	0.0%	0.0%	-	0.0%	0.0%	12.5%	1.9%
2011	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	-	-	0.0%	0.0%	0.0%
2012	-	-	0.0%	0.0%	0.0%	-	0.0%	-	-	0.0%	-	0.0%	0.0%	0.0%	-	0.0%	-	-	0.0%	0.0%	0.0%	0.0%
Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0%	7.1%	0.0%	0.0%	27.3%	0.0%	0.0%	0.0%	0.0%	0.0%	3.7%	1.1%

Station Locations

Centralized Locations

1 Grasonville	4 Westminster	7 Owings Mills	11 White Oak	14 Clinton	17 Prince Frederick
2 Hagerstown	5 Erdman Avenue	8 Bel Air	12 Derwood	15 Annapolis	18 Waldorf
3 Frederick	6 Edgewood Street	9 Columbia	13 Glenarden	16 Glen Burnie	19 North East

Self Testing Locations

131 Baltimore County	132 Anne Arundel County	133 MD National Capital Park & Planning	134 Montgomery County	135 Howard County
136 Prince George's County	137 WSSC	138 Baltimore City	139 Washington Gas	140, 141 Verizon
142 University of Maryland				

(5) The average increase or decrease in tailpipe emission levels for HC, CO, and NOx (if applicable) after repairs by model year and vehicle type for vehicles receiving a mass emissions test (IM240): Not applicable

(b) QUALITY ASSURANCE REPORT

(1) The number of inspection stations and lanes:

(i) Operating throughout the year:

18 Centralized Inspection Stations
81 Centralized Inspection Lanes
106 Test Units

(ii) Operating for only part of the year:

11 Self-testing Fleets with 37 Inspection Units

(2) The number of inspection stations and lanes operating throughout the year:

(i) Receiving overt performance audits in the year:

18 Centralized Inspection Stations
81 Centralized Inspection Lanes
106 Test Units

11 Self-testing Fleets with 37 Inspection Units

All centralized test lanes are audited hourly by on-site Customer Service Agents during station operating hours: Monday, Thursday, and Friday 8:30 a.m. to 5:00 p.m., Tuesday and Wednesday 7:00 a.m. to 7:00 p.m., and Saturday 7:00 a.m. to 1:00 p.m. Each inspection lane is overtly audited 54 times per week.

(ii) Not receiving overt performance audits in the year:

None.

(iii) Receiving covert performance audits in the year:

The contractor conducts covert personnel audits for newly hired employees at 30-, 60- and 90-days post-certification. These audits are observational audits performed by the contractor's training and auditing team for the purpose of ensuring proper policies and procedures are being followed. Annualized, the number of covert personnel audits is approximately 200.

Video surveillance digital video files are generated in all test lanes, and are reviewed by the contractor when questions arise about testing procedures and to conduct random surveillance audits. The video system was improved in late 2007 to enhance oversight and was again enhanced with the 2009 refurbishment to give comprehensive coverage of the testing process.

As a result of the 2009 enhancement of the surveillance system, the contractor conducts approximately 20 to 25 covert audits by observing video of test procedures of random and suspect inspectors at each facility every week. Approximately –1,100 surveillance audits were conducted in 2014.

Investigations, including covert visual performance audits and review of video files, are performed by MDE and MVA personnel, the Contractor's station management, Quality Assurance Manager, regional District Manager, Operations Manager, and HR Manager, when suspected incidents of fraudulent or unacceptable testing practices occur. In calendar year 2014 a total of 150 tests, affecting all stations, were determined by MDE to be questionable due to inconsistent data, and were referred to the Contractor for investigation. The Contractor reviewed the data, and did further investigation on more than half of them, including video surveillance review and/or formal interview of inspectors and/or management involved. All reported incidents are analyzed by Contractor specialists to determine the severity and reasonability of the data. Confirmatory analysis through multiple mediums, such as video surveillance, independent software simulation testing, and recreation of the scenario that produced the data anomaly are all performed following a first-tier analysis by Contractor specialists. The Contractor uses historical reference materials and other knowledge bases to rank and identify legitimately suspicious incidents.

The State of Maryland conducts covert performance audits in the centralized stations/lanes when deemed necessary as part of an investigation of activities suspected or reported to be fraudulent or otherwise unacceptable. Investigators from the Motor Vehicle Administration (MVA) Investigative and Security Services Division are available to conduct such audits [see section (b) (9)]. Three (3) covert audits were conducted in 2014 by the Investigative and Security Services Division.

(iv) Not receiving covert performance audits in the year:

There were no centralized stations that did not receive a covert visual performance audit or investigation.

The 37 fleet inspection units did not receive a covert visual performance audit or investigation, however, data triggers were monitored.

(v) That have been shut down as a result of overt performance audits:

The units shut down automatically when not meeting performance requirements. 49 test units at centralized stations and 12 units at self-inspecting fleets have failed at least one performance check and shut down until corrective action was taken.

If an hourly audit reveals a procedure error the manager is notified to correct it immediately, negating the need for a shut down.

(3) The number of covert audits:

(i) Conducted with the vehicle set to fail per test type:

Not currently applicable. Covert audits using vehicles set to fail the test(s) are not currently a part of the VEIP quality assurance activities. The necessary personnel and budget resources are not available.

However, Maryland believes that the investigations, covert visual audits, and data triggers requiring supervisor verification described above in section (b) (2) (iii) produce the same, if not better, results than would have been achieved by covert audits with vehicles set to fail. Maryland's vigilance in the lanes, prompt investigation of suspected problems, and immediate, decisive action when fraudulent or unacceptable activities are confirmed, clearly meet the intent of conducting covert audits with vehicles set to fail.

(ii) Conducted with the vehicle set to fail any combination of two or more test types:

Not currently applicable

See (b) (3) (i) for additional comments.

(iii) Resulting in a false pass per test type:

Not currently applicable

See (b) (3) (i) for additional comments.

(iv) Resulting in a false pass for any combination of two or more test types:

Not currently applicable

See (b) (3) (i) for additional comments.

(v) - (viii) Reserved

(4) The number of inspectors and stations:

(i) That were suspended, fired, or otherwise prohibited from testing as a result of covert audits:

One (1) inspectors were terminated for fraudulent or unacceptable testing practices as a result of MDE/MVA/Contractor investigations, including covert visual performance audits verified through video surveillance monitoring.

(ii) That were suspended, fired, or otherwise prohibited from testing for other causes:

Thirteen (13) inspectors were terminated for non-fraud related activities and violations.

No stations were suspended or otherwise prohibited from testing for other causes.

(iii) That received fines:

None.

5) The number of inspectors licensed or certified to conduct testing:

200 inspectors in the centralized stations
70 inspectors in the self-testing fleets

6) The number of hearings:

(i) Held to consider adverse actions against inspectors and stations:

The State held no hearings of its own. Results of overt audits and covert audit investigations are reported to the contractor for appropriate follow-up and action. The Contractor has its own policies and procedures for disciplinary action/penalties against emissions inspectors and other personnel who deviate from acceptable performance standards and/or procedures. The Contractor's performance standards for

emissions inspectors, and the disciplinary policies and procedures are appropriate and sufficient, and are implemented effectively to ensure a high level of performance by its emissions inspectors and other personnel. The Contractor has demonstrated zero tolerance for egregious acts committed by emissions inspectors, e.g., fraud and bribery. Such confirmed acts result in automatic and immediate termination.

(ii) Resulting in adverse actions against inspectors and stations:

Not applicable.

(7) The total amount collected in fines from inspectors and stations by type of violation:

None related to Quality Assurance matters. See (b) (6) (i) and (b) (4) (i) for additional comments.

(8) The total number of covert vehicles available for undercover audits over the year:

Four (4) vehicles from the MVA Investigative and Security Services Division are available for undercover audits.

(9) The number of covert auditors available for undercover audits:

No investigators from the MVA Investigative and Security Services Division are available for undercover audits. MDE, MVA, and Contractor staff participate in covert audits as needed.

(c) QUALITY CONTROL REPORT

(1) The number of emission testing sites and lanes in use in the program:

18 Centralized Inspection Stations
81 Centralized Inspection Lanes
106 Test Positions

Table (c) (1)

Station Number	Station Name	Lanes	Test Units
1	Grasonville	3	3
2	Hagerstown	3	4
3	Frederick	3	5
4	Westminster	4	4
5	Erdman Avenue	6	9
6	Edgewood Street	6	7
7	Owings Mills	6	7
8	Bel Air	4	5
9	Columbia	6	7
11	White Oak	6	9
12	Derwood	6	12
13	Glenarden	6	7
14	Clinton	4	5
15	Annapolis	5	6
16	Glen Burnie	4	5
17	Prince Frederick	3	3
18	Waldorf	3	4
19	North East	3	4

Self-Testing Fleets

11 Fleets with 37 Testing Units

Station	Unit Number	Name
131	1	Baltimore County
132	1	Anne Arundel County, Millersville
132	2	Anne Arundel County, Davidsonville
133	1	MD National Capital Park and Planning
134	1	Montgomery County
135	1	Howard County, Elkridge
135	2	Howard County, Ellicot City
136	1	Prince George's County, Capitol Heights
136	2	Prince George's County, Lanham
137	1	WSSC, Hyattsville
137	2	WSSC, Silver Spring
138	1	Baltimore City
139	1	Washington Gas, Rockville
139	2	Washington Gas, Forestville
140	1	Verizon, Harmans
140	2	Verizon, Fitch Lane, Baltimore
140	3	Verizon, Frederick
140	4	Verizon, Rockville
140	5	Verizon, Capital Heights
140	6	Verizon, Fort Washington
140	7	Verizon, Annapolis
140	8	Verizon, Westminster
140	9	Verizon, Hagerstown
140	10	Verizon, Randallstown
140	11	Verizon, Gaithersburg
140	12	Verizon, Dogwood Road, Baltimore
141	1	Verizon, Druid Park Drive, Baltimore
141	2	Verizon, Bel Air
141	3	Verizon, Shannon Drive, Baltimore
141	4	Verizon, Ellicot City
141	5	Verizon, Clinton
141	6	Verizon, Beltsville
141	7	Verizon, Hunt Valley
141	8	Verizon, Colesville
141	9	Verizon, Lanham
141	10	Verizon, Waldorf
142	1	University of MD

(2) The number of equipment audits by station and lane:

Table (c) (2)

Number of Audits

Centralized Stations

STATION	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	TOTAL
1	24		25		24								73
2	25		26	25	24								100
3	24	24	24		27	26							125
4	24		26		30		28						108
5	23		24	23	24		23	23	24		23	25	212
6	24		24	5	23		24		24		27		151
7	24		24	25	25		25		23		24		170
8	25		25	26	25		26						127
9	25		26	27	26		26		25		24		179
11	26	23	25	23	23	23	26	24	25		23		241
12	26	25	23	24	22	23	24	25	24	25	23	23	287
13	23		22	22	23		23	19	23		22		177
14	24		23	24	23		25						119
15	27		25	25	25		24		26				152
16	25		26	24	24		27						126
17	20		21		20								61
18	20		20	21	23								84
19	25		24		25								74
Total	434	72	433	294	436	72	301	91	194	25	166	48	2,566

Note: Centralized station unit numbers are assigned uniformly based on lane number and position within the lane. A lane may contain up to 2 units, but most lanes do not. Therefore, skipped unit numbers do not inherently correspond to unaudited units.

Self Testing Fleets: Audits Performed

Name	MDE Number	FIS	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Total
Baltimore County	19	131	18												18
Anne Arundel County	7	132	13												13
Anne Arundel County	12	132		13											13
MD National Capital Park & Planning	62	133	15												15
Montgomery County	13	134	11												11
Howard County	9	135	14												14
Howard County	233	135		12											12
PG County	4	136	12												12
PG County	402	136		13											13
WSSC	17	137	12												12
WSSC	267	137		12											12
Baltimore City	41	138	14												14
Washington Gas	22	139	3												3
Washington Gas	24	139		15											15
Verizon	81	140	13												13
Verizon	256	140		13											13
Verizon	397	140			11										11
Verizon	33	140				19									19
Verizon	166	140					12								12
Verizon	285	140						12							12
Verizon	156	140							13						13
Verizon	288	140								11					11
Verizon	403	140									13				13
Verizon	135	140										11			11
Verizon	272	140											12		12
Verizon	404	140												12	12
Verizon	251	141	12												12
Verizon	261	141		13											13
Verizon	255	141			12										12
Verizon	289	141				12									12
Verizon	283	141					13								13
Verizon	399	141						10							10
Verizon	254	141							13						13
Verizon	165	141								15					15
Verizon	398	141									12				12
Verizon	405	141										9			9
University Of MD	400	142	12												12
Total			149	91	23	31	25	22	26	26	25	20	12	12	462

(3) The number and percentage of stations that have failed equipment audits:

Table (c) (3)
Failed Inspections
Centralized Stations

Station	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Total
1			1										1
2	1		2	1									4
3					3	2							5
4			2		6		4						12
5			1		1				1			2	5
6	1		1				1		1		4		8
7	1		1	2	2		2				1		9
8	1		1	2	1		2						7
9	1		2	3	2		2		1				11
11	3		2				3	1	2				11
12	3	2		1		1	1	2	1	2			13
13	1				1		1	2	1				6
14	2			1									3
15	3		1	1	1				2				8
16	1		2				3						6
17					1								1
18				1	3								4
19	1				1								2
Total	19	2	16	12	22	3	19	5	9	2	5	2	116

Percent of Audits

Station	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Total
1	0.0%		4.0%		0.0%								1.4%
2	4.0%		7.7%		0.0%								4.0%
3	0.0%	0.0%	0.0%		11.1%	7.7%							4.0%
4	0.0%		7.7%	20.0%	20.0%		14.3%						11.1%
5	0.0%		4.2%	0.0%	4.2%		0.0%	0.0%	4.2%		0.0%	8.0%	2.4%
6	4.2%		4.2%	0.0%	0.0%		4.2%		4.2%		14.8%		5.3%
7	4.2%		4.2%	8.0%	8.0%		8.0%		0.0%		4.2%		5.3%
8	4.0%		4.0%	7.7%	4.0%		7.7%						5.5%
9	4.0%		7.7%	11.1%	7.7%		7.7%		4.0%		0.0%		6.1%
11	11.5%	0.0%	8.0%	0.0%	0.0%	0.0%	11.5%	4.2%	8.0%		0.0%		4.6%
12	11.5%	8.0%	0.0%	4.2%	0.0%	4.3%	4.2%	8.0%	4.2%	8.0%	0.0%	0.0%	4.5%
13	4.3%		0.0%	0.0%	4.3%		4.3%		4.3%		0.0%		3.4%
14	8.3%		0.0%	4.2%	0.0%		0.0%						2.5%
15	11.1%		4.0%	4.0%	4.0%		0.0%		7.7%				5.3%
16	4.0%		7.7%	0.0%	0.0%		11.1%						4.8%
17	0.0%		0.0%		5.0%								1.6%
18	0.0%		0.0%	4.8%	13.0%								4.8%
19	4.0%		0.0%		4.0%								2.7%
Total	4.4%	2.8%	3.7%	4.1%	5.0%	4.2%	6.3%	5.5%	4.6%	8.0%	3.0%	4.2%	4.5%

Self-Testing Fleets
Failed Audits

Name	MDE Number	FIS	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Total
Baltimore County	19	131	6												6
Anne Arundel County	7	132	1												1
Anne Arundel County	12	132		1											1
MD National Capital Park & Planning	62	133	3												3
Montgomery County	13	134	1												1
Howard County	9	135	2												2
Howard County	233	135		1											1
PG County	4	136	0												0
PG County	402	136		1											1
WSSC	17	137	0												0
WSSC	267	137		1											1
Baltimore City	41	138	4												4
Washington Gas	22	139	0												0
Washington Gas	24	139		4											4
Verizon	81	140	2												2
Verizon	256	140		0											0
Verizon	397	140			0										0
Verizon	33	140				9									9
Verizon	166	140					0								0
Verizon	285	140						1							1
Verizon	156	140							2						2
Verizon	288	140								2					2
Verizon	403	140									1				1
Verizon	135	140										0			0
Verizon	272	140											1		1
Verizon	404	140												1	1
Verizon	251	141	0												0
Verizon	261	141		2											2
Verizon	255	141			1										1
Verizon	289	141				0									0
Verizon	283	141					1								1
Verizon	399	141						0							0
Verizon	254	141							1						1
Verizon	165	141								3					3
Verizon	398	141									0				0
Verizon	405	141										0			0
University Of MD	400	142	0												0
Total			19	10	1	9	1	1	3	5	1	0	1	1	52

Percent of Audits

Name	MDE Number	FIS	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Total
Baltimore County	19	131	33.3 %												33.3 %
Anne Arundel County	7	132	7.7%												7.7%
Anne Arundel County	12	132		7.7%											7.7%
MD National Capital Park & Planning	62	133	20.0 %												20.0 %
Montgomery County	13	134	9.1%												9.1%
Howard County	9	135	14.3 %												14.3 %
Howard County	233	135		8.3%											8.3%
PG County	4	136	0.0%												0.0%
PG County	402	136		7.7%											7.7%
WSSC	17	137	0.0%												0.0%
WSSC	267	137		8.3%											8.3%
Baltimore City	41	138	28.6 %												28.6 %
Washington Gas	22	139	0.0%												0.0%
Washington Gas	24	139		26.7 %											26.7 %
Verizon	81	140	15.4 %												15.4 %
Verizon	256	140		0.0%											0.0%
Verizon	397	140			0.0%										0.0%
Verizon	33	140				47.4 %									47.4 %
Verizon	166	140					0.0%								0.0%
Verizon	285	140						8.3%							8.3%
Verizon	156	140							15.4 %						15.4 %
Verizon	288	140								18.2 %					18.2 %
Verizon	403	140									7.7%				7.7%
Verizon	135	140										0.0%			0.0%
Verizon	272	140											8.3%		8.3%
Verizon	404	140												8.3%	8.3%
Verizon	251	141	0.0%												0.0%
Verizon	261	141		15.4 %											15.4 %
Verizon	255	141			8.3%										8.3%
Verizon	289	141				0.0%									0.0%
Verizon	283	141					7.7%								7.7%
Verizon	399	141						0.0%							0.0%
Verizon	254	141							7.7%						7.7%
Verizon	165	141								20.0 %					20.0 %
Verizon	398	141									0.0%				0.0%
Verizon	405	141										0.0%			0.0%
University Of MD	400	142	0.0%												0.0%
Total			12.8 %	11.0 %	4.3%	29.0 %	4.0%	4.5%	11.5 %	19.2 %	4.0%	0.0%	8.3%	8.3%	11.3 %

(4) Number and percentage of stations and lanes shut down as a result of equipment audits:

.

Station	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Total
1	0		0		0								0
2	0		0	0	0								0
3	0	0	0		0	0							0
4	0		0		0		0						0
5	0		0	0	0		0	0	0		0	0	0
6	0		0	0	0		0		0		0		0
7	0		0	0	0		0		0		0		0
8	0		0	0	0		0						0
9	0		0	1	0		0		0		0		1
11	0	0	0	0	0	0	0	0	0		0		0
12	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0		0	0	0		0		0		0		0
14	0		0	0	0		0						0
0	0		0	0	0		0		0				0
16	0		0	0	0		0						0
17	0		0		0								0
18	0		0	0	0								0
19	0		0		0								0
Total	0	0	0	1	0	0	0	0	0	0	0	0	1

Station	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Total
1	0.0%		0.0%		0.0%								0.0%
2	0.0%		0.0%		0.0%								0.0%
3	0.0%	0.0%	0.0%		0.0%	0.0%							0.0%
4	0.0%		0.0%	0.0%	0.0%		0.0%						0.0%
5	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
6	0.0%		0.0%	0.0%	0.0%		0.0%		0.0%		0.0%		0.0%
7	0.0%		0.0%	0.0%	0.0%		0.0%		0.0%		0.0%		0.0%
8	0.0%		0.0%	0.0%	0.0%		0.0%						0.0%
9	0.0%		0.0%	3.7%	0.0%		0.0%		0.0%		0.0%		0.6%
11	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%		0.0%		0.0%
12	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
13	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%		0.0%
14	0.0%		0.0%	0.0%	0.0%		0.0%						0.0%
15	0.0%		0.0%	0.0%	0.0%		0.0%		0.0%				0.0%
16	0.0%		0.0%	0.0%	0.0%		0.0%						0.0%
17	0.0%		0.0%		0.0%								0.0%
18	0.0%		0.0%	0.0%	0.0%								0.0%
19	0.0%		0.0%		0.0%								0.0%
Total	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%							0.0%

Self-Testing Fleets - Stations Shut Down

Name	MDE Number	FIS	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Total
Baltimore County	19	131	0												0
Anne Arundel County	7	132	1												1
Anne Arundel County	12	132		0											0
MD National Capital Park & Planning	62	133	3												3
Montgomery County	13	134	0												0
Howard County	9	135	1												1
Howard County	233	135		1											1
PG County	4	136	0												0
PG County	402	136		2											2
WSSC	17	137	0												0
WSSC	267	137		0											0
Baltimore City	41	138	4												4
Washington Gas	22	139	0												0
Washington Gas	24	139		5											5
Verizon	81	140	2												2
Verizon	256	140		0											0
Verizon	397	140			0										0
Verizon	33	140				0									0
Verizon	166	140					0								0
Verizon	285	140						1							1
Verizon	156	140							1						1
Verizon	288	140								0					0
Verizon	403	140									0				0
Verizon	135	140										0			0
Verizon	272	140											0		0
Verizon	404	140												1	1
Verizon	251	141	0												0
Verizon	261	141		1											1
Verizon	255	141			0										0
Verizon	289	141				0									0
Verizon	283	141					0								0
Verizon	399	141						0							0
Verizon	254	141							0						0
Verizon	165	141								0					0
Verizon	398	141									0				0
Verizon	405	141										0			0
University Of MD	400	142	0												0
Total			11	9	0	0	0	1	1	0	0	0	0	1	23

Percent of Audits

Name	MDE Number	FIS	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11	Unit 12	Total
Baltimore County	19	131	0.0%												0.0%
Anne Arundel County	7	132	7.7%												7.7%
Anne Arundel County	12	132		0.0%											0.0%
MD National Capital Park & Planning	62	133	20.0 %												20.0%
Montgomery County	13	134	0.0%												0.0%
Howard County	9	135	7.1%												7.1%
Howard County	233	135		8.3%											8.3%
PG County	4	136	0.0%												0.0%
PG County	402	136		15.4 %											15.4%
WSSC	17	137	0.0%												0.0%
WSSC	267	137		0.0%											0.0%
Baltimore City	41	138	28.6 %												28.6%
Washington Gas	22	139	0.0%												0.0%
Washington Gas	24	139		33.3 %											33.3%
Verizon	81	140	15.4 %												15.4%
Verizon	256	140		0.0%											0.0%
Verizon	397	140			0.0%										0.0%
Verizon	33	140				0.0%									0.0%
Verizon	166	140					0.0%								0.0%
Verizon	285	140						8.3%							8.3%
Verizon	156	140							7.7%						7.7%
Verizon	288	140								0.0%					0.0%
Verizon	403	140									0.0%				0.0%
Verizon	135	140										0.0%			0.0%
Verizon	272	140											0.0%		0.0%
Verizon	404	140												8.3%	8.3%
Verizon	251	141	0.0%												0.0%
Verizon	261	141		7.7%											7.7%
Verizon	255	141			0.0%										0.0%
Verizon	289	141				0.0%									0.0%
Verizon	283	141					0.0%								0.0%
Verizon	399	141						0.0%							0.0%
Verizon	254	141							0.0%						0.0%
Verizon	165	141								0.0%					0.0%
Verizon	398	141									0.0%				0.0%
Verizon	405	141										0.0%			0.0%
University Of MD	400	142	0.0%												0.0%
Total			7.4%	9.9%	0.0%	0.0%	0.0%	4.5%	3.8%	0.0%	0.0%	0.0%	0.0%	8.3%	5.0%

(d) ENFORCEMENT REPORT

(1) Basic statistics on enforcement, including:

(i) An estimate of the number of vehicles subject to the inspection program, including the results of an analysis of the registration database:

3.3 million vehicles

(ii) The percentage of motorist compliance based upon a comparison of the number of valid final tests with the number of subject vehicles:

Initial test notices are mailed to motorists eight weeks prior to the test date. If the vehicle is not tested within seven days after the due date, a warning letter is mailed to the vehicle owner stating the vehicle must be tested within 30 days or the registration will be suspended. If the vehicle is not tested within 30 days, the registration is suspended. When it is time for registration renewal, a letter is mailed to the motorist informing them their registration will not be renewed until the VEIP test requirements are satisfied.

Based on testing results through June 30, 2015:

3,259,922 vehicles were due for VEIP testing in the 2013-2014 test cycle.

3,009,038 vehicles due in 2013 - 2014 achieved compliance.

92% Compliance

Note: Continued tracking of subject vehicles beyond June 30, 2015 will document more vehicles with a valid final result and increase the compliance percentage.

(iii) The total number of compliance documents issued to inspection stations:

The VEIP currently uses a plain-paper based unique certificate issuance process. Unique certificate numbers are issued, but controlled documents are now no longer required.

(iv) The number of missing compliance documents:

N/A

(v) The number of time extensions and other exemptions granted to motorists:

193,289 Time extensions
71,501 Senior exemptions (70 years of age or older, vehicle driven less than 5,000 miles per year)
9,203 Disabled exemptions (permanent disabled license tag, vehicle driven less than 5,000 miles per year)

(vi) The number of compliance surveys conducted, number of vehicles surveyed in each, and the compliance rates found:

In Maryland there are over 60 different law enforcement agencies are utilizing License Plate Recognition (LPR) Technology, with 78 percent of those agencies networked and sending their scanned LPR data to the Maryland Coordination and Analysis Center (MCAC) for storage and management as part of Maryland's LPR Program.

Maryland's License Plate Recognition (LPR) Program was adopted with the goal of protecting life, identifying criminal activity, securing infrastructure, and improving the safety of Maryland's roadways. In addition to alerts for criminal activity and the like, there are many alerts related to suspended drivers licenses, suspended vehicle registration plates, and violations of the state's emission inspection program. All of these violations of Maryland's motor vehicle laws adversely affect the safety of Maryland roadways and of the public in general.

According to an MCAC report, those agencies who have networked their mobile license plate reader systems to the MCAC have been alerted to approximately 61,752 violations of the vehicle emission inspection program for the calendar year 2014.

In addition, any vehicle stopped by a State or local police officer for any reason, is subject to a registration status check, including compliance with VEIP requirements.

(2) Registration denial based enforcement programs shall provide the following additional information:

(i) A report of the program's efforts and actions to prevent motorists from falsely registering vehicles out of the program area or falsely changing fuel type or weight class on the vehicle registration, and the results of special studies to investigate the frequency of such activity:

Motorists who do not comply with the requirement for new residents are identified by State and local law enforcement personnel. State and local Police routinely search out and identify individuals who are residing in Maryland with out-of-state license tags. This is accomplished by parking lot surveys and surveillance, e.g., apartment, town house, and condominium developments. Violators are issued a citation and given 30 days in which to register the vehicle. If the individual does not comply within that timeframe, Maryland may notify the individual's home state, and (under reciprocal agreement) the individual's driver's license will be suspended until compliance with Maryland's residence requirement is achieved. Neither the State Police nor local Police agencies maintain statistics on these enforcement actions.

Vehicle owners can indicate exempt status (e.g., diesel, electric) when the vehicle registration information is initially submitted. The exemption will be included in the registration database. If the exemption is missed in the registration database, and the owner receives an emissions inspection notice, the owner can indicate exempt status on the inspection notice and return it. In either event, receipt of initial registration information and/or returned inspection notice, MVA checks all claimed exemptions through confirmation of the Vehicle Identification Number (VIN). If there is any question, inconsistency, or conflict with the VIN confirmation, the vehicle owner is given two options:

a. Submit to MVA a Certified Statement from a recognized technician confirming the vehicle exemption status, or
b. Bring the vehicle to a VEIP station for verification by a VEIP representative.

(ii) The number of registration file audits, number of registrations reviewed, and compliance rates found in such audits:

MVA performs a weekly survey of the registration database. The MVA sends a weekly list of vehicles scheduled for testing to the contractor. The contractor sends the test results back to MVA, along with a list of vehicles, the “no-show list”, that were not brought in for the scheduled test. MVA checks the no-show list against the vehicle registration database. Vehicles that have been sold, moved out of the area, scrapped, granted extensions, etc. are removed from the no show list. The remaining vehicles are sent a notice of intent to suspend the vehicle registration. [see Section (d) (1) (ii)]. If motorists still do not come in for testing, the registration is suspended.

Also, as discussed in Section (d) (1) (vi), stopped by a State or local police officer for any reason, or observed by a police license plate reader is subject to a registration status check, including compliance with VEIP requirements.

(3) Computer-matching based enforcement programs shall provide the following additional information:

(i) The number and percentage of subject vehicles that were tested by the initial deadline, and by other milestones in the cycle:

Not Applicable

(ii) A report on the program's efforts to detect and enforce against motorists falsely changing vehicle classifications to circumvent program requirements, and the frequency of this type of activity:

Not Applicable

(iii) The number of enforcement system audits, and the error rate found during those audits:

Not Applicable

(4) Sticker-based enforcement systems shall provide the following additional information:

(i) A report on the program's efforts to prevent, detect, and enforce against sticker theft and counterfeiting, and the frequency of this type of activity:

Not applicable

(ii) A report on the program's efforts to detect and enforce against motorists falsely changing vehicle classifications to circumvent program requirements, and the frequency of this type of activity:

Not applicable

(iii) The number of parking lot sticker audits conducted, the number of vehicles surveyed in each, and the noncompliance rate found during those audits:

Not applicable

(e) ADDITIONAL REPORTING REQUIREMENTS

(1) Any changes made in program design, funding, personnel levels, procedures, regulations, and legal authority, with detailed discussion and evaluation of the impact on the program of all such changes:

None

(2) Any weaknesses or problems identified in the program within the two-year reporting period, what steps have already been taken to correct those problems, the results of those steps, and any future efforts planned:

None